



Community Development Department
Current Planning Division
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MEMORANDUM

City of Beaverton

Community Development Department

To: Interested Parties

From: City of Beaverton Planning Division

Date: February 28, 2019

Subject: **DR2018-00134 / TP2018-0010 Willamette Water Supply Program**

Please find attached the Notice of Decision for **DR2018-00134/TP2018-0010 - Willamette Water Supply Program**. Pursuant to Section 50.40.11.E of the Beaverton Development Code, the decision for DR2018-00134/TP2018-0010 - Willamette Water Supply Program, is final, unless appealed within twelve (12) calendar days following the date of the decision. The procedures for appeal of a Type 2 Decision are specified in Section 50.65 of the Beaverton Development Code. The appeal shall include the following in order for it to be accepted by the Director:

- The case file number designated by the City.
- The name and signature of each appellant.
- Reference to the written evidence provided to the decision making authority by the appellant that is contrary to the decision.
- If multiple people sign and file a single appeal, the appeal shall include verifiable evidence that each appellant provided written testimony to the decision making authority and that the decision being appealed was contrary to such testimony. The appeal shall designate one person as the contact representative for all pre-appeal hearing contact with the City. All contact with the City regarding the appeal, including notice, shall be through this contact representative.
- The specific approval criteria, condition, or both being appealed, the reasons why a finding, condition, or both is in error as a matter of fact, law or both, and the evidence relied on to allege the error.
- The appeal fee of \$250.00, as established by resolution of the City Council.

The appeal closing date for DR2018-00134 / TP2018-0010 Willamette Water Supply Program, is 4:30 p.m., Tuesday, March 12, 2019.

The complete case files including findings, conclusions, and conditions of approval, if any, are available for review. The case files may be reviewed at the Beaverton Planning Division, Community Development Department, 4th Floor, Beaverton Building/City Hall; 12725 SW Millikan Way between 7:30 a.m. and 4:30 p.m., Monday through Friday, except holidays. For more information about the case file, please contact Steve Regner, Senior Planner, at (503) 526-2675.

Accessibility information: *This information can be made available in large print or audio tape upon request. Assistive listening devices, sign language interpreters, or qualified bilingual interpreters can be made available at any public meeting or program with 72 hours advance notice. To request these services, contact **Steve Regner** by calling 711 **503-526-2675** or email sregner@beavertonoregon.gov*

Staff Report: February 28, 2019

DR2018-00134 / TP2018-0010 Willamette Water Supply Program



STAFF REPORT

DATE: February 28, 2019

TO: Interested Parties

FROM: Steve Regner, Senior Planner

PROPOSAL: **Willamette Water Supply Program
DR2018-00134 / TP2018-0010**

LOCATION: Pipeline segment under City of Beaverton review runs along SW Scholls Ferry Road between SW 175th Avenue and SW Tile Flat Road, and SW Tile Flat Road between SW Scholls Ferry Road and SW Kobbe Drive.
Tax Lots 101, 200, 203, 204, 300, 400, and 500, 1000, 1100, and 1300 of Washington County Assessor's Map 2S106B; and Tax Lots 400, 500, 4100, 4200, 4300, and 4400 of Washington County Assessor's Map 2S2010 and Right of Way

ZONING: R1 District (R1 Residential Urban High Density District)
R2 District (R2 Residential Urban Medium Density District)
R4 District (R4 Residential Urban Medium Density District)
Washington County Interim Zone – AF-20 (Agriculture & Forest District)

SUMMARY: The applicant, Willamette Water Supply Program, requests Design Review Two approval for the installation of a segment of regional water pipeline, ultimately connecting Hillsboro and the Tualatin Valley Water District to the Willamette River near Wilsonville. The applicant further requests a Tree Plan Type Two for the removal of trees related to pipeline installation.

APPLICANT: Willamette Water Supply Program
Tammy Cleys
1850 SW 170th Avenue
Beaverton, OR 97003

APPLICANT'S
REPRESENTATIVES:

Angelo Planning Group
Shayna Rehberg
921 SW Washington Street, Suite 468
Portland, OR 97205

PROPERTY
OWNERS

Tualatin Valley Water District
1850 SW 170th Avenue
Beaverton, OR 97003

Ed Bartholemy
18485 SW Scholls Ferry Road
Beaverton, OR 97007

Scott & Nancy Edmonds Living Trust
PO Box 1612
Lake Oswego, OR

Douglas L Evans
19161 SW Tile Flat Road
Beaverton, OR 97007

Ronald K and Jennifer J Anderson
19237 SW Tile Flat Road
Beaverton, OR 97007

RECOMMENDATION:

APPROVAL of DR2018-0134 / TP2018-0010 Willamette Water Supply Program, subject to conditions identified at the end of this report.

EXHIBIT 1 ZONING/VICINITY/AERIAL MAP

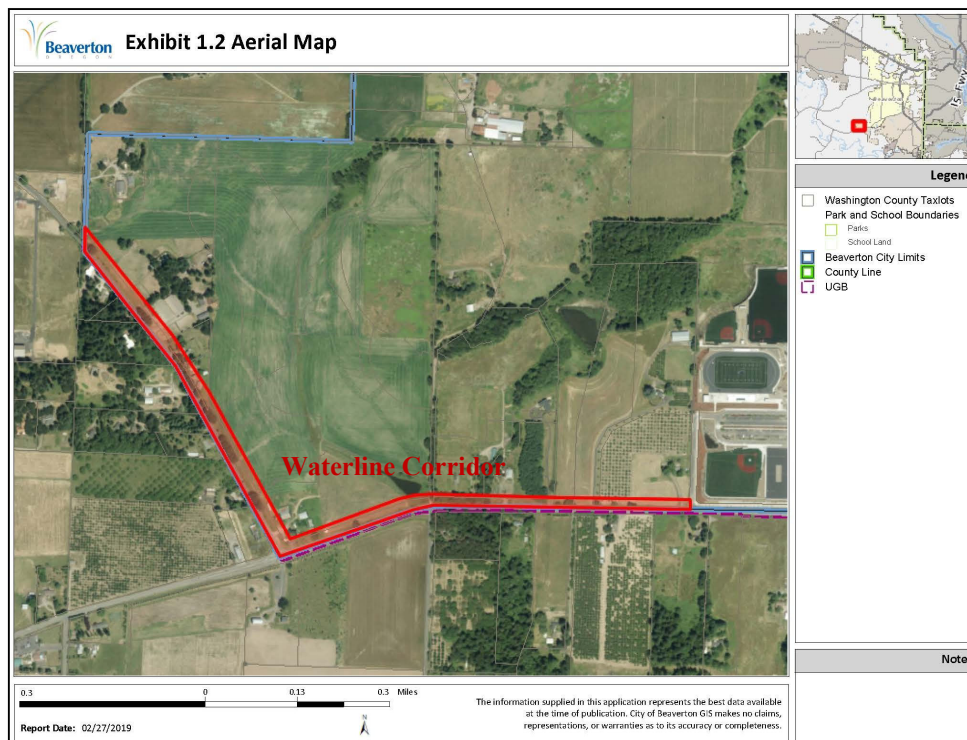
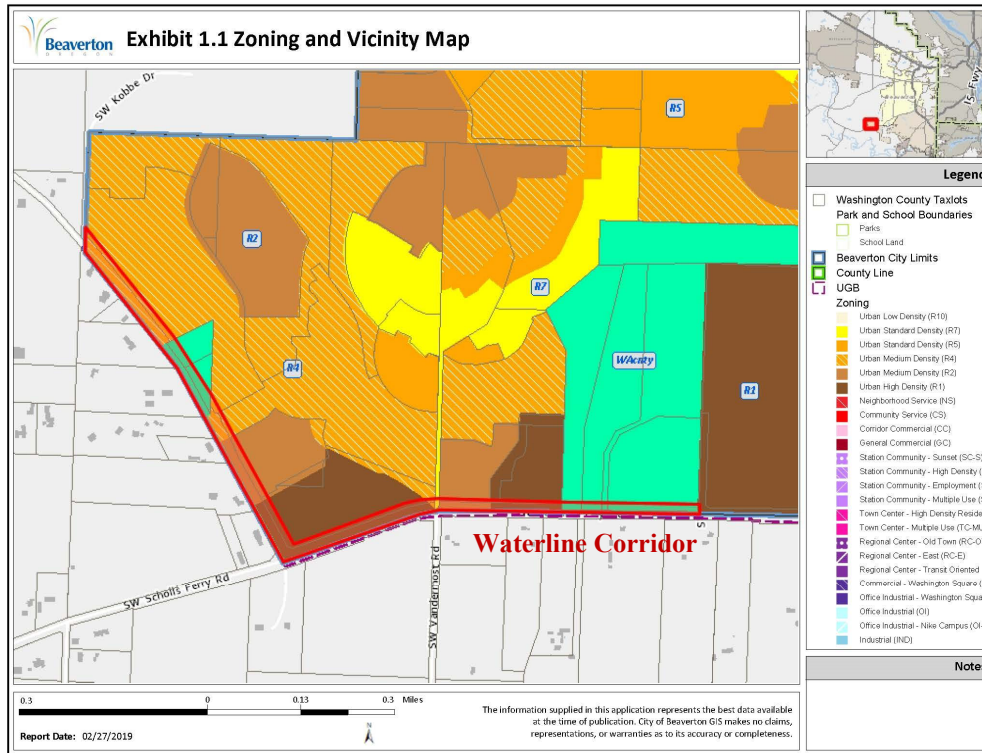
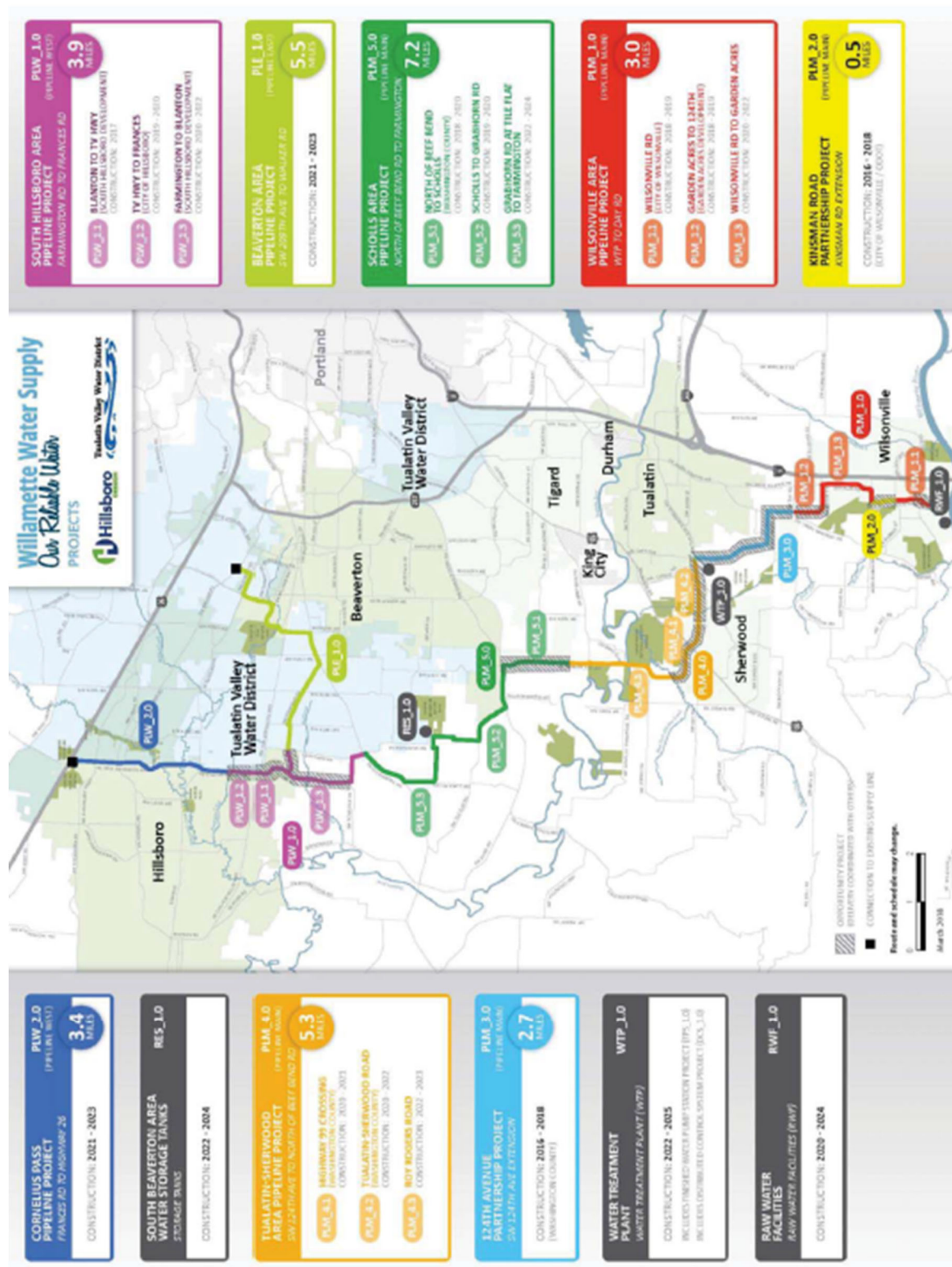


EXHIBIT 2 SYSTEM MAP



BACKGROUND FACTS

Key Application Dates:

Application	Submittal Date	Deemed Complete	120-Day*	365-Day**
DR2018-0134	Sep. 26, 2018	Jan. 7, 2019	May 7, 2019	Jan. 7, 2020
TP2018-0010	Sep. 26, 2018	Jan. 7, 2019	May 7, 2019	Jan. 7, 2020

* Pursuant to Section 50.25.9 of the Development Code this is the latest date, without a continuance, by which a final written decision on the proposal can be made.

** This is the latest date, with a continuance, by which a final written decision on the proposal can be made.

Existing Conditions:

Zoning	R1, R2, R4, Washington County Interim AF-20	
Current Development	Undeveloped	
Site Size	Approximately 5,480 linear feet, mostly in the right of way	
NAC	Neighbors Southwest	
Surrounding Uses	<u>Zoning:</u> North/East: R1, R2, R4, WaCo Interim AF-20 South: Washington County (AF-20) West: Washington County (AF-10)	<u>Uses:</u> North/East: Undeveloped land with residential subdivisions permitted South: Undeveloped /Agricultural West: Undeveloped/ Agricultural

DESCRIPTION OF APPLICATIONS AND TABLE OF CONTENTS

	PAGE No.
Attachment A: Facilities Review Committee Technical and Recommendation Report	FR1-11
Attachment B: DR2018-0134 Design Review Two	DR1-3
Attachment C: TP2018-0010 Tree Plan Two	TP1-9
Attachment D: Washington County Development Code	WC1-21
Attachment E: Conditions of Approval	COA1-4

Exhibit 1: Zoning/Vicinity/Aerial Maps

Exhibit 2: System Map

Exhibit 3: Public Comments:

Exhibit 3.1 Email received from Ed Bartholemy, 18485 SW Scholls Ferry Road on February 15, 2019, expressing concern about pipeline construction delaying or otherwise impacting development of property under his ownership. Mr. Bartholemy requests a condition of approval that limits the construction impacts on his property to the area covered by the permanent waterline easement, eliminating a temporary construction easement shown on Exhibit A of the applicant's materials. Staff notes that the acquisition of permanent and temporary easements are a private matter, and the city plays a limited role, only ensuring that proper easements are in place prior to issuing construction permits. A condition is provided requiring the easements to be in place prior to Site Development permit issuance. Furthermore, there are no approval criteria related to this issue where findings could be made to support this specific condition of approval request.

Mr. Bartholemy also expressed concern about the waterline installation potentially blocking or increasing the costs of connecting future private development to public utility lines in SW Scholls Ferry right-of-way. Mr. Bartholemy has requested a condition of approval guaranteeing access to utilities without increasing costs. Staff notes that there is no specific evidence provided by Mr. Bartholemy demonstrating that the proposed waterline would preclude or increase costs of future private development connecting to public utilities in the public right of way. Furthermore, there are no approval criteria related to this issue where findings could be made to support this specific condition of approval.

As such, no additional conditions of approval are added based on the public comment received.

Exhibit 3.2 Email received from Desi Kurtz, 18485 SW Scholls Ferry Road on February 25, 2019, reiterating the concerns of Ed Bartholemy as outlined above in Exhibit 3.1, as well as a marked up site plan outlining specific areas of concern. As staff noted in the analysis of Exhibit 3.1, the concerns contained in this email do not warrant additional conditions of approval.

Project Overview

The applicant, Willamette Water Supply Program, proposes to construct a segment of a regional waterline along SW Scholls Ferry Road and SW Tile Flat Road, either directly within or adjacent to public right-of-way. The project consists of:

- A 66" (typical) water pipeline.
- Occasional appurtenances (at grade and above ground) such as manways, air valves, blowoff valves, mainline valves, and vaults.
- Temporary staging areas during construction.
- Temporary construction easements and permanent utility easements.
- Pipeline sections within and adjacent to right-of-way, buried under roadway surfaces or adjacent areas; where the pipeline exists outside right-of-way, surface areas will be covered with top soil and revegetated post-construction.

Pursuant to City of Beaverton Development Code (BDC) Section 50.05.1.C, an application subject to a Type 1, 2, or 3 procedure may be filed by "(p)ublic agencies that own the property or have passed a resolution declaring that they intend to exercise their statutory authority to condemn the property." The applicant, WWSP, serves as an agent for Tualatin Valley Water District (TVWD) and the City of Hillsboro, which are public agencies with statutory rights of eminent domain.

The entirety of the pipeline under review with this application is within the City of Beaverton. However, small segments of the pipeline are proposed to be constructed under property still zone Washington County Interim Zone. Pursuant to the Urban Planning Area Agreement (UPAA) between the City of Beaverton and Washington County, this application will must apply County use and development standards in reviewing development of this land. Therefore, this staff report addresses applicable criteria from both the City's and County's development codes.

**FACILITIES REVIEW COMMITTEE
TECHNICAL REVIEW AND RECOMMENDATIONS
DR2018-00134 TP2018-0010 WILLAMETTE WATER SUPPLY PROGRAM**

Section 40.03 Facilities Review Committee:

The Facilities Review Committee has conducted a technical review of the application, in accordance with the criteria contained in Section 40.03 of the Development Code. The Committee's findings and recommended conditions of approval are provided to the decision-making authority. As they will appear in the Staff Report, the Facilities Review Conditions may be re-numbered and placed in different order.

The decision-making authority will determine whether the application as presented meets the Facilities Review approval criteria for the subject application and may choose to adopt, not adopt, or modify the Committee's findings, below.

The Facilities Review Committee Criteria for Approval will be reviewed for all criteria that are applicable to the submitted applications as identified below:

- **All twelve (12) criteria are applicable to the submitted Design Review Two application as submitted.**
- **Facilities Review criteria do not apply to the Tree Plan Type Two application.**

A. All critical facilities and services related to the development have, or can be improved to have, adequate capacity to serve the proposal at the time of its completion.

Chapter 90 of the Development Code defines "critical facilities" to be services that include public water, public sanitary sewer, storm water drainage and retention, transportation, and fire protection. The applicant states that the proposed development, a regional waterline, does not require critical facilities to service the proposal, except for transportation facilities needed for construction access. Staff finds that the roads utilized for construction and maintenance, SW Scholls Ferry Road and SW Tile Flat Road provide sufficient access.

Furthermore, the staff acknowledges documentation provided by the applicant and Clean Water Services that assures compliance with applicable Clean Water Services regulations. The Committee recommends a condition of approval requiring connection permits from CWS prior to issuance of the Site Development Permit.

The Committee finds that the development will provide required critical facilities, as conditioned. Therefore, the Committee finds the proposal meets the criterion for approval.

Therefore, the Committee finds that by meeting the conditions of approval, the proposal meets the criterion.

- B. Essential facilities and services are available, or can be made available, with adequate capacity to serve the development prior to occupancy. In lieu of providing essential facilities and services, a specific plan may be approved if it adequately demonstrates that essential facilities, services, or both will be provided to serve the proposed development within five years of occupancy.***

Chapter 90 of the Development Code defines “essential facilities” to be services that include transit improvements, police protection, and pedestrian and bicycle facilities in the public right-of-way.

The applicant states that the proposed development, an underground regional water line, does not require essential facilities and services. Staff concurs that the water line does not require school, transit, or police services, nor will it induce new pedestrian or bicycle trips that would necessitate new infrastructure in the right of way.

Therefore, the Committee finds that by this criterion is not applicable.

- C. The proposal is consistent with all applicable provisions of Chapter 20 (Land Uses) unless the applicable provisions are modified by means of one or more applications which shall be already approved or which shall be considered concurrently with the subject proposal.***

Staff cites the Code Conformance Analysis chart at the end of this report, which evaluates the project as it relates the applicable Code requirements of Chapter 20 for the R1, R2, R4 and Washington County Interim zones as applicable to the above mentioned criteria. As demonstrated on the chart, the development proposal meets all applicable standards.

Therefore, the Committee finds that the proposal meets the criterion.

- D. The proposed development is consistent with all applicable provisions of Chapter 60 (Special Regulations) and all improvements, dedications, or both, as required by the applicable provisions of Chapter 60 (Special Regulations), are provided or can be provided in rough proportion to the identified impact(s) of the proposal.***

Staff cites the Code Conformance Analysis chart at the end of this report, which evaluates the proposal as it relates the applicable Code requirements of Chapter 60, in response to the above mentioned criteria.

Section 60.55.10 General Provisions

The proposed project, an underground water line, will not create any new trips. No dedication of right-of-way or street improvements are required with the development. The proposal does not trigger the threshold for a Traffic Impact Analysis. Lane closures on segments of Tile Flat Road will be required to complete construction of the water line. A Facilities Permit from Washington County for lane closures is required prior to Site Development permit issuance.

60.60 Trees and Vegetation Requirements

The proposed water line will necessitate the removal of 27 community trees and three in a Significant Natural Resource Area (SNRA). Removal of trees in SNRAs require mitigation when greater than 50% of the surveyed, non-exempt diameter breast height on the site. When considering the definition of the site for the purposes of tree removal, staff recommended that the applicant consider the various site boundaries for the adjacent approved Planned Unit Developments, Scholls Heights (casefile CU2017-0010 et al) and The Ridge (casefile CU2017-0003). The DBH removed from the Scholls Heights PUD is 20% and the DBH removed from The Ridge is 41%. All trees removed as part of the subject regional water line project already have approval for removal from the above listed PUDs. As the total percentage of SNRA DBH is below 50%, no SNRA mitigation is required. Community trees have no mitigation requirements.

The committee recommends standard conditions of approval for tree protection fencing during construction for trees identified for preservation.

60.65 Utility Undergrounding

To meet the requirements of Section 60.65, staff recommends a standard condition of approval requiring that utility lines are placed underground, unless an exemption or fee-in-lieu option can be satisfied. The applicant has provided preliminary information that demonstrates that the seven poles identified as being impacted by the proposed waterline construction will qualify for fee-in-lieu based on the thresholds located in Table 60.65.25.3.

Therefore, the Committee finds that by meeting the conditions of approval, the proposal meets the criterion.

- E. Adequate means are provided or can be provided to ensure continued periodic maintenance and necessary normal replacement of the following private common facilities and areas, as applicable: drainage ditches, roads and other improved rights-of-way, structures, recreation facilities, landscaping, fill and excavation areas, screening and fencing, ground cover, garbage and recycling storage areas and other facilities not subject to maintenance by the City or other public agency.**

The applicant's narrative states that no private common facilities are included with this proposal. Staff notes that the majority of the proposed water line is located within public rights of way. In cases where the water line is located in private property, easements are proposed for construction and maintenance. The proposal as represented does not present any barriers, constraints, or design elements that would prevent or preclude required maintenance of the private infrastructure and facilities on site.

Therefore, the Committee finds that the proposal meets the criterion.

F. There are safe and efficient vehicular and pedestrian circulation patterns within the boundaries of the development.

As noted above in response to criteria A and D, the vehicular patterns are only impacted during construction, limited to certain street closures along Tile Flat Road. Following construction, traffic patterns will revert to predevelopment conditions. Pedestrian infrastructure is limited along the water line corridor, and will not be affected by the proposed project. The Committee recommends a condition of approval requiring the acquire a Washington County Facilities Permit for all street closures or changes to traffic patterns.

Therefore, the Committee finds that by meeting the conditions of approval, the proposal meets the criterion.

G. The development's on-site vehicular and pedestrian circulation systems connect to the surrounding circulation systems in a safe, efficient, and direct manner.

As noted in response to criteria A, D and F, impacts to circulation systems are limited to certain street closures along Tile Flat Road. Following construction, traffic patterns will revert to predevelopment conditions. Pedestrian infrastructure is limited along the water line corridor, and will not be affected by the proposed project.

Therefore, the Committee finds that the proposal meets the criterion.

H. Structures and public facilities serving the development site are designed in accordance with adopted City codes and standards and provide adequate fire protection, including, but not limited to, fire flow.

Preliminary comments have been received from Tualatin Valley Fire and Rescue District (TVF&R). As the proposed development is limited to an underground water line, fire protection is not required. The proposal is for an underground

water line, as such no additional structures or facilities are proposed.

Therefore, the Committee finds that the criterion is not applicable.

- I. Structures and public facilities serving the development site are designed in accordance with adopted City codes and standards and provide adequate protection from hazardous conditions due to inadequate, substandard or ill-designed development.**

The Committee finds that review of the construction documents at the building and site development permit stages will ensure protection from hazardous conditions due to inadequate, substandard or ill-designed development. The area of work, delineated by typical works zones in Exhibits A and Q demonstrate the construction approach to ensure adequate safety during construction and subsequent maintenance.

The Committee finds that review of the construction documents at the building and site development permit stages will ensure protection from hazardous conditions due to inadequate, substandard or ill-designed development.

Therefore, the Committee finds that by meeting the conditions of approval, the proposal meets the criterion.

- J. Grading and contouring of the development site is designed to accommodate the proposed use and to mitigate adverse effect(s) on neighboring properties, public right-of-way, surface drainage, water storage facilities, and the public storm drainage system.**

The applicant cites the details in the grading and restoration plans, (Exhibits J and B respectively), stating that grading has been designed to accommodate the proposed use and minimize adverse impacts on the surrounding uses. Staff concurs that construction and restoration approach limits adverse impacts to neighboring properties and right-of-way.

The applicant must show compliance with Site Development erosion control measure at the time of Site Development permit issuance.

Therefore, the Committee finds that by meeting the conditions of approval, the proposal meets the criterion.

- K. Access and facilities for physically handicapped people are incorporated into the development site and building design, with particular attention to providing continuous, uninterrupted access routes.**

The proposed development is an underground water line that will not be accessible to the public. Furthermore, the route of the water line does not impact any facilities designed for the use of handicapped individuals.

Therefore, the Committee finds that the criterion is not applicable.

L. The proposal contains all applicable application submittal requirements as specified in Section 50.25.1 of the Development Code.

The applicant submitted the applications on September 26, 2018 and was deemed complete on January 9, 2019. In the review of the materials during the application review, the Committee finds that all applicable application submittal requirements, identified in Section 50.25.1 are contained within this proposal.

Therefore, the Committee finds the proposal meets the criterion for approval.

Code Conformance Analysis

Chapter 20 Use and Site Development Requirements

R1 Zoning District

CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL	MEETS CODE?
Development Code Section 20.05.20. Land Uses – R1			
Use, Permitted	Public Sewer and Water and Utility Transmission Lines	Applicant proposes a new public water transmission line.	YES
Development Code Section 20.05.15. Site Development Standards – R1			
Land Area Minimum	1,000 square feet	Corridor mostly in right-of-way	N/A
Lot Dimensions Minimum	Interior Width: 14 feet Interior Depth: None Corner Width: 20 feet Corner Depth: None	Corridor mostly in right-of-way	N/A
Yard Setbacks Minimum	Front: 10 feet Side: 0 or 5 or 10 feet Rear: 15 feet	No development subject to setbacks proposed.	N/A
Building Height Maximum	60'	Aboveground structures limited to appurtenances approximately three feet tall.	YES

R2 Zoning District

CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL	MEETS CODE?
Development Code Section 20.05.20. Land Uses – R2			
Use, Permitted	Public Sewer and Water and Utility Transmission Lines	Applicant proposes a new public water transmission line.	YES
Development Code Section 20.05.15. Site Development Standards – R2			
Land Area Minimum	2,000 square feet	Corridor mostly in right-of-way	N/A
Lot Dimensions Minimum	Interior Width: 14 feet Interior Depth: None Corner Width: 20 feet Corner Depth: None	Corridor mostly in right-of-way	N/A

Yard Setbacks Minimum	Front: 10 feet Side: 0 or 5 or 10 feet Rear: 15 feet	No development subject to setbacks proposed.	N/A
Building Height Maximum	60'	Aboveground structures limited to appurtenances approximately three feet tall.	YES

R4 Zoning District

CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL	MEETS CODE?
Development Code Section 20.05.20. Land Uses – R4			
Use, Permitted	Public Sewer and Water and Utility Transmission Lines	Applicant proposes a new public water transmission line.	YES
Development Code Section 20.05.15. Site Development Standards – R4			
Land Area Minimum	4,000 square feet	Corridor mostly in right-of-way	N/A
Lot Dimensions Minimum	Interior Width: 20 or 40 feet Interior Depth: 80 feet Corner Width: 20 or 40 feet Corner Depth: 80 feet	Corridor mostly in right-of-way	N/A
Yard Setbacks Minimum	Front: 10 feet Side: 0 or 5 or 10 feet Rear: 15 feet	No development subject to setbacks proposed.	N/A
Building Height Maximum	60'	Aboveground structures limited to appurtenances approximately three feet tall.	YES

Washington County Interim – AF-20 Zoning District

CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL	MEETS CODE?
Development Code Section 344. Land Uses – AF-20			
Use, Permitted	Utility Facilities necessary for public services	Applicant proposes a new public water transmission line.	YES, through a Type II Process
Development Code Section 403 Site Development Standards – AF-20			
Master Plan	A Master Plan is Required to Determine Development Standard Compliance	A Master Plan was submitted.	YES

Chapter 60 Special Requirements

CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL	MEETS CODE?
Development Code Section 60.05			
Design Review Principles, Standards, and Guidelines	Requirements for new development and redevelopment.	Design Review standards will be reviewed in the Design Review portion of the staff report.	See Findings for DR2018-0134
Development Code Section 60.07			
Drive-Up window facilities	Requirements for drive-up, drive-through and drive-in facilities.	No drive-up window facilities are proposed.	N/A
Development Code Section 60.10			
Floodplain Regulations	Requirements for properties located in floodplain, floodway, or floodway fringe.	No portions of the site are identified as being in a floodplain, floodway, or floodway fringe.	N/A
Development Code Section 60.12			
Habitat Friendly and Low Impact Development Practices	Optional program offering various credits available for use of specific Habitat Friendly or Low Impact Development techniques.	No Habitat Friendly or Low Impact Development techniques proposed.	N/A
Development Code Section 60.15 – Land Division Standards			
Land Division Standards	Standards pertaining to Land Divisions	No Land Division is proposed.	N/A
Development Code Section 60.25 – Off Street Loading			
Loading Facilities	No Required Loading	No Proposed Loading	N/A
Development Code Section 60.30 – Off-Street Parking			
Off-street motor vehicle parking	No Required Parking	No Proposed Parking	N/A
Required Bicycle Parking	No Required Parking	No Proposed Parking	
Compact Spaces	No Required Parking	No Parking Proposed	N/A
Development Code Section 60.55 - Transportation			
Transportation Facilities	Regulations pertaining to the construction or reconstruction of transportation facilities.	Refer to Facilities Review Committee findings herein.	Yes- with COA
Development Code Section 60.60			
Trees & Vegetation	Regulations pertaining to the removal and preservation of trees.	The applicant identifies 27 community trees, either on private property or within the right-of-way, and 3 significant grove trees on private property for removal.	See Findings for TP2018-0002

Development Code Section 60.65			
Utility Undergrounding	All existing overhead utilities and any new utility service lines within the project and along any existing frontage, except high voltage lines (>57kV) must be placed underground.	Seven poles are identified as impacted. Each of the seven poles qualifies for Fee in Lieu as the length of utility to be placed underground falls below thresholds described in Table 60.65.25.3. Fee in	Yes- with COA

**ANALYSIS AND FINDINGS FOR
DESIGN REVIEW TYPE TWO APPROVAL
WILLAMETTE WATER SUPPLY PROGRAM
DR2018-0134**

Section 40.20.05. Design Review Applications; Purpose

The purpose of Design Review is to promote Beaverton's commitment to the community's appearance, quality pedestrian environment, and aesthetic quality. It is intended that monotonous, drab, unsightly, dreary and inharmonious development will be discouraged. Design Review is also intended to conserve the City's natural amenities and visual character by insuring that proposals are properly related to their sites and to their surroundings by encouraging compatible and complementary development.

Section 40.20.15.2.C Approval Criteria

In order to approve a Design Review Two application, the decision making authority shall make findings of fact based on evidence provided by the applicant demonstrating that all the following criteria are satisfied:

1. *The proposal satisfies the threshold requirements for a Design Review Two application.*

The applicant proposes to install an underground regional waterline. Typically, this proposal would qualify for a Type 1 Design Review. However, as a portion of the proposed pipeline is located within Washington County Interim Zone AF-20, where pipelines are permitted through a Type 2 process, the project is instead reviewed under a Type Two Design Review

Therefore, staff finds that the proposal meets the criterion for approval.

2. *All City application fees related to the application under consideration by the decision making authority have been submitted.*

The applicant paid the required associated fee for a Design Review Two application.

Therefore, staff finds that the proposal meets the criterion for approval.

3. *The proposal contains all applicable application submittal requirements as specified in Section 50.25.1 of the Development Code.*

The applicant submitted the application on and was submitted on September 26, 2018, and deemed complete on January 7, 2019. In the review of the materials during the application review, staff finds that all applicable application submittal requirements, identified in Section 50.25.1 are contained within this proposal.

Therefore, staff finds that the proposal meets the criterion for approval.

4. *The proposal is consistent with all applicable provisions of Sections 60.05.15 through 60.05.30 (Design Standards).*

Staff cites the findings in the Design Review Standard Analysis chart in this report which evaluate the project in response to applicable Code standards of Sections 60.05.15 through 60.05.30 (Design Standards). In part, the chart provides a summary response to design review standards determined to be applicable in the subject case. The applicant's plans and materials show compliance with these standards. Certain conditions of approval are proposed to ensure the plan is constructed consistent with these standards.

Therefore, staff finds that by meeting the conditions of approval, the proposal meets the criterion for approval.

5. *For additions to or modifications of existing development, the proposal is consistent with all applicable provisions of Sections 60.05.15 through 60.05.30 (Design Standards) or can demonstrate that the additions or modifications are moving towards compliance of specific Design Standards if any of the following conditions exist:*

The proposed regional waterline is not an addition or modification of existing development.

Therefore, staff finds the criterion is not applicable

6. *Applications and documents related to the request, which will require further City approval, shall be submitted to the City in the proper sequence.*

The applicant has submitted this Design Review Type Two application for this project. No other applications are required of the applicant for this stage of City approvals.

Therefore, staff finds the proposal meets the criterion for approval.

Recommendation

Based on the facts and findings presented, staff recommend **APPROVAL** of **DR2018-0134 (Willamette Water Supply Program)**, subject to the conditions below (Attachment E).

Design Review Standards Analysis

Section 60.05.25 Landscape, Open Space, and Natural Areas Design Standards

DESIGN STANDARD	PROJECT PROPOSAL	MEETS STANDARD
Minimum Landscaping		
60.05.25.10.A. Grading within 25 of residential property line	The applicant states that the existing contours will generally be restored following construction. Grading will be coordinated with abutting private development.	YES
60.05.25.10.B. Grading near protected trees	No grading is proposed near protected trees. Thirty trees are proposed for removal. See tree removal findings of TP2018-0010 in Attachment C.	N/A
60.05.25.5.C Grading Exemptions	No grading exemptions claimed.	N/A
Natural Areas		
60.05.25.12 No encroachment into buffer areas.	The applicant states that impacts in the vegetated buffer have been reviewed by CWS and are addressed in the programmatic Service Provider Letter. Restoration plans are provided to demonstrate impact mitigation.	YES

**TP2018-0010
ANALYSIS AND FINDINGS FOR
TREE PLAN TWO APPROVAL**

Section 40.90.05 Tree Plan Applications: Purpose

Healthy trees and urban forests provide a variety of natural resource and community benefits for the City of Beaverton. Primary among those benefits is the aesthetic contribution to the increasingly urban landscape. Tree resource protection focuses on the aesthetic benefits of the resource. The purpose of a Tree Plan application is to provide a mechanism to regulate pruning, removal, replacement, and mitigation for removal of Protected Trees (Significant Individual Trees, Historic Trees, trees within Significant Groves and Significant Natural Resource Areas (SNRAs)), and Community Trees, thus helping to preserve and enhance the sustainability of the City's urban forest.

Section 40.45.15.5.C Approval Criteria:

In order to approve a Tree Plan Two application, the decision making authority shall make findings of fact based on evidence provided by the applicant demonstrating that all the following criteria are satisfied.

1. The proposal satisfies the threshold requirements for a Tree Plan Two application.

Thresholds 1 and 3 of the Tree Plan Two application state;

- 1. Removal of five (5) or more Community Trees, or more than 10% of the number of Community Trees on the site, whichever is greater, within one (1) calendar year period...*
- 3. Commercial, Residential, or Industrial zoning district: Removal of up to and including 75% of the total DBH of non-exempt surveyed tree(s) found on the project site within SNRAs, Significant Groves, or Sensitive Areas as defined by Clean Water Services.*

The applicant states that the trees proposed for removal in SNRAs for the proposed project site consist solely of trees that have been approved for removal on The Ridge and Scholls Heights developments sites. However, staff notes that as there is the potential for the proposed water line project to be constructed prior to the adjacent private development, the tree removal must be considered and permitted with this land use approval.

Given the unusual nature of the project, a narrow corridor of impact for a regional infrastructure project, the definition of project site must be considered. Beaverton Development Code defines site as follows:

"That parcel of real property in common ownership, notwithstanding that the particular application may be for development of a portion of the site only." (BDC Chp. 90)

While the corridor traverses right of way as well as several tax lots, impacts to Significant Natural Resource Area trees are limited to two property owners, whose collection of property has been previously referred to as The Ridge and Scholls Heights. Both The Ridge and Scholls Heights are previously approved Planned Unit Developments.

Given the city definition of “site”, and previously approved projects on or adjacent to the corridor of impact this level of removal, it is appropriate to consider the entirety of each of the PUD development sites to serve as the site for purposes of addressing the tree removal requirements. In totality of The Ridge development (casefile TP2017-0005), approximately 41% of the total diameter at breast height (DBH) of non-exempt surveyed trees in the SNRA were proposed for removal. All SNRA trees proposed for removal with the subject water line proposal were approved for removal with The Ridge PUD land use approval.

In totality of the Scholls Heights development (casefile TP2017-0008), approximately 20% of the total DBH of non-exempt surveyed trees in the SNRA were proposed for removal. All SNRA trees proposed for removal with the subject water line proposal were approved for removal with the Scholls Heights PUD land use approval.

In addition to the SNRA trees mentioned above, 27 community trees are identified for removal.

Thus, removal of more than five Community Trees is proposed and less than 75% of non-exempt trees in the SNRAs are proposed for removal. Therefore, Thresholds 1 and 3 are met and a Tree Plan Two application is required.

Therefore, staff finds that the proposal meets the criterion for approval.

2. All City application fees related to the application under consideration by the decision making authority have been submitted.

The applicant paid the required fee for a Tree Plan Two application.

Therefore, staff finds that the proposal meets the criterion for approval.

3. If applicable, removal of any tree is necessary to observe good forestry practices according to recognized American National Standards Institute (ANSI) A300-1995 standards and International Society of Arborists (ISA) standards on the subject.

The applicant proposes tree removal for the purposes of installing a regional waterline. No trees are proposed to be removed for good forestry practices.

Therefore, staff finds that the criterion is not applicable.

4. If applicable, removal of any tree is necessary to accommodate physical development where no reasonable alternative exists.

The applicant states that the alignment of proposed waterline has been rigorously analyzed to meet technical, engineering, and other criteria, and tree removal is necessary to accommodate its development.

Staff notes that proposed regional waterline has been routed to avoid number wetlands and larger SNRA areas. Furthermore, the majority of the impacts caused by the location and construction of the waterline is located in future right-of-way, to be dedicated and improved with the development of adjacent properties. This future dedication and street improvements, along with the previously approved development of The Ridge and Scholls Heights PUDs would necessitate the removal of all trees identified for removal with the subject waterline.

Staff identifies numerous trees proposed for preservation in or near the Tree Plan Study area. Staff recommends a condition of approval requiring standard tree protection measures consistent with Beaverton Development Code 60.60.20 Tree Protection Standards.

Therefore, staff finds by meeting the Conditions of Approval, the proposal meets the criterion for approval.

5. If applicable, removal of any tree is necessary because it has become a nuisance by virtue of damage to property or improvements, either public or private, on the subject site or adjacent sites.

The applicant states that tree removal is intended to allow development of the site, and no nuisance trees exist. Staff concurs.

Therefore, staff finds that the criterion for approval does not apply.

6. If applicable, removal is necessary to accomplish public purposes, such as installation of public utilities, street widening, and similar needs, where no reasonable alternative exists without significantly increasing public costs or reducing safety.

The applicant states that all trees identified for removal with this application are related to the installation of a regional waterline. The alignment is limited to roadway corridors and directly abutting private property to limit public costs.

Therefore, staff finds that the proposal meets the criterion for approval.

7. If applicable, removal of any tree is necessary to enhance the health of the tree, grove, SNRA, or adjacent trees, [or] to eliminate conflicts with structures or vehicles.

The applicant states that Tree removal has not been indicated as necessary for enhancing the health of the SNRA. Staff concurs.

Therefore, staff finds that the criterion for approval does not apply.

8 If applicable, removal of a tree(s) within a SNRA or Significant Grove will not result in a reversal of the original determination that the SNRA or Significant Grove is significant based on criteria used in making the original significance determination.

The applicant states that no additional trees are proposed for removal in SNRAs for the construction of the regional water lines beyond the trees that were approved for removal for The Ridge and the Scholls Heights developments. Consistent with the staff report findings for The Ridge PUD and Scholls Heights PUD, proposed tree removal in the SNRAs will not result in a reversal of the original determination of the SNRAs' significance. Further, the temporary impacts in SNRAs caused by pipeline installation will be addressed by replanting the impacted area with native vegetation, which will improve conditions in these SNRAs currently considered to be "marginal" or "degraded".

Staff concurs that the removal of three SNRA trees will not have result in the reversal of any SNRA designation.

Therefore, staff finds that the proposal meets the criterion for approval.

9. If applicable, removal of a tree(s) within a SNRA or Significant Grove will not result in the remaining trees posing a safety hazard due to the effects of windthrow.

The applicant states that the limited proposed removal of trees within the SNRAs on site will not result in isolated trees or hazards due to windthrow.

Therefore, staff finds that the proposal meets the criterion for approval.

10. The proposal is consistent with all applicable provisions of Section 60.60 Trees and Vegetation and Section 60.67 Significant Natural Resources.

Staff cites the Code Conformance Analysis chart at the end of the Tree Plan Staff Report, which evaluates the project as it relates to applicable code requirements of Sections 60.60 through 60.67, as applicable to the aforementioned criterion. As demonstrated on the chart, the proposal complies, or can be made to comply through conditions, with all

applicable provisions of Chapter 60.60 and 60.67.

Therefore, staff find by meeting the Conditions of Approval, the proposal meets the criterion for approval.

11. Grading and contouring of the site is designed to accommodate the proposed use and to mitigate adverse effect(s) on neighboring properties, public right-of-way, surface drainage, water storage facilities, and the public storm drainage system.

This approval criterion is identical to Facilities Review approval criterion J found within Attachment A above. Staff incorporate the finding and associated condition of approval, as stated therein.

Therefore, staff find by meeting the Conditions of Approval, the proposal meets the criterion for approval.

12. The proposal contains all applicable application submittal requirements as specified in Section 50.25.1 of the Development Code.

The submitted tree plan proposal contained all applicable submittal requirements necessary to be deemed complete.

Therefore, staff finds that the proposal meets the criterion for approval.

13. Applications and documents related to the request, which will require further City approval, shall be submitted to the City in the proper sequence.

The applicant has submitted the required application materials for review of a Tree Plan Two application in the proper sequence. The Tree Plan Two application is being processed concurrently with the Design Review Two application (DR2018-0134). The Tree Plan Two application is dependent upon approval of the Design Review Two application, and as such staff recommends a condition of approval that the above mentioned applications be approved in order for this Tree Plan Two to be approved.

Therefore, staff finds that by meeting the conditions of approval the proposal meets the criterion.

Recommendation

Based on the facts and findings presented, staff recommend **APPROVAL** of **TP2018-0134 (Willamette Water Supply Program)** subject to the conditions identified in Attachment E.

Code Conformance Analysis Summary Table 60.60 & 60.67

STANDARD		PROJECT PROPOSAL	MEETS STAND ARD?
60.60.15.2 Removal and Preservation Standards - general			
60.60.15.2. C.1-3	<p>For trees within SNRAs the following additional standards shall apply:</p> <p>1. The minimum DBH of non-exempt surveyed trees that must be preserved on a site is as follows:</p> <p>b) Residential zoning districts: Twenty-five percent (25%) of the DBH of non-exempt surveyed trees found on a project site.</p> <p>2. DBH to be retained shall be preserved in cohesive areas, termed Preservation Areas, when development is proposed in SNRAs or Significant Groves.</p> <p>3. Native understory vegetation and trees shall be preserved in Preservation Areas.</p>	<p>For The Ridge development, approximately 41% of the DBH of non-exempt surveyed trees in the SNRA on The Ridge site were approved for removal, resulting in approximately 59% of the total DBH to be preserved. For the Scholls Heights development, approximately 20% of the total DBH of non-exempt surveyed trees in the SNRA on the Scholls Heights site was approved for removal, resulting in approximately 80% of the total DBH to be preserved. The applicant does not propose to remove any trees beyond the previously approved removals.</p> <p>The applicant states that the DBH will be preserved and retained in cohesive preservation areas and preserved within natural resource tracts, previously approved through the Scholls Heights and The Ridge PUDs</p> <p>The applicant states that native and understory vegetation will be replanted following construction of the waterline.</p>	Yes
60.60.15.2.C.4	<p>Preservation Areas, conditioned for protection through the Development Review process, shall be preserved in clusters that are natural in appearance rather than in linear strips. Preservation Areas should connect with adjoining portions of the Significant Grove or SNRA...</p>	<p>Preservation areas, as approved through The Ridge and Scholls Valley Heights PUDs, will result in clusters of SNRA trees, and not linear strips. The limited impact of waterline construction adjacent to a county roadway ensures that construction is as least impactful as possible to adjacent SNRA tree groves.</p>	Yes

60.60.15. 2.C.5	Preservation Areas, conditioned for protection through the Design Review process, shall be set aside in conservation easements and recorded with a deed restriction with Washington County, unless otherwise approved by the City.	Due to the limited impacts of the waterline project to the SNRA, as well as the previously approved Scholls Heights and The Ridge PUDs, staff finds that proper SNRA preservation will occur following construction of the subject waterline and adjacent private development.	Yes
60.60.15. 2.C.6	Preservation Areas, conditioned for protection through the Land Division process, shall be set aside in tracts and recorded with a deed restriction with Washington County, unless otherwise approved by the City.	No Land Division is approved with this development. However, preservation tracts have been approved through the adjacent The Ridge and Scholls Heights PUD's for preservation of SNRA trees adjacent to the waterline development.	N/A
60.60.20 Tree Protection Standards – during Development			
60.60.20. 1.A.1	Trees classified as Protected Trees under this Code shall be protected during development... Fence shall be 4' tall orange plastic or nor snow fence, secured to six foot (6') tall metal posts, driven two feet (2') into the ground. Heavy 12 gauge wire shall be strung between each post...	The applicant states that the trees to be retained on site will be protected consistent with the requirements of 60.60.20.1.A.1.	Yes
60.60.20. 1.B	Within the protected root zone of each tree, the following development shall not be permitted: 1. Construction or placement of new buildings. 2. Grade change or cut and fill, except where hand excavation is approved with the submittal of an arborist's report, as part of application approval. 3. New impervious surfaces. 4. Trenching for utilities, irrigation, or drainage. 5. Staging or storage of any kind. 6. Vehicle maneuvering or parking	The applicant states that no prohibited activities shall take place with the root zone of protected SNRA trees. However, staff recommends a condition of approval to restrict development within the tree protection areas of SNRA tree, consistent with Section 60.60.20.1.B.	Yes w/COA
60.60.25 Mitigation Requirements			
60.60.25. 1A	All mitigation tree planting shall take place in conformance with accepted arboricultural practices and shall be spaced a minimum of ten (10) feet apart.	On site planting mitigation is not proposed or required.	N/A

60.60.25.1B	Trees planted for the purpose of tree removal mitigation shall be maintained in accordance with the approved mitigation plan. Monitoring of mitigation planting shall be the ongoing responsibility of the property owner	On site planting mitigation is not proposed or required.	N/A
60.60.25.1.C	Trees planted for the purpose of tree removal mitigation shall be set aside in a conservation easement or a separate tract and shall be designated as "Mitigation Trees"	On site planting mitigation is not proposed or required.	N/A
60.60.25.1.E	Street trees shall not be counted as providing mitigation of a SNRA or Significant Grove.	Mitigation is not required and Street Trees are not being counted towards mitigation.	N/A
60.60.25.2 Calculation for mitigation specific to Significant Groves			
60.60.25.2.A	Calculate the total DBH of the trees to be removed. Denote both deciduous and coniferous trees in separate tables; however, both tables will result in the sum total of the DBH to be removed.	The applicant's arborist report calculates the total DBH in conformance with this requirement. Mitigation is not required.	Yes
60.60.25.2B	If the total DBH of trees to be removed is less than or equal to 50% of the total DBH of surveyed trees on the site, then no mitigation is required for the trees to be removed.	The total DBH of non-exempt trees to be removed is less than 50% of the total DBH of surveyed trees. Accordingly, mitigation is not required.	Yes
60.60.25.3 Additional requirements for mitigation specific to Significant Groves			
60.60.25.3A	Dead or dying trees within a Significant Grove or SNRA shall be fallen when required for safety. Such tree falling shall not require mitigation. However, the fallen log should remain in the Significant Grove...	The applicant states that no dead or dying trees are proposed for removal within an SNRA.	N/A
60.60.25.3B	All trees planted for mitigation must meet the following minimum requirements: ... Min. 2" at planting...	On site planting mitigation is not proposed or required.	N/A

60.67 Significant Natural Resources			
60.67.05.1	Development activities in locations of possible significant natural resources and/or wetlands are subject to relevant procedures identified in Chapter 50.	The applicant's plans show that most of the development will occur around the significant natural resource areas, as identified in the South Cooper Mountain Community Plan, preserving most of the trees and other natural resources. The applicant has submitted a natural resource assessment with their application. For the trees that cannot be retained, the applicant has submitted a Tree Plan application concurrently with all the other applicable applications, in compliance with procedures identified in Chapter 50.	Yes
60.67.05.2	For sites identified in the Local Wetland Inventory, notice of the proposed development shall be provided to DSL.	Wetlands and associated corridors are regulated jointly by the Oregon Department of State Lands and the US Army Corps of Engineers. The applicant has submitted the required documentation for joint permits. Conditions prepared by Site Development Engineering identify required permit prior to issuing the Site Development Permit.	Yes
60.67.10	Development activities in locations of Significant Riparian Corridors are subject to relevant procedures identified in Chapter 50.	The applicant has conducted a site assessment and submitted documentation to meet Clean Water Services natural resource assessment requirements.	Yes

ANALYSIS AND FINDINGS FOR APPLICABLE WASHINGTON COUNTY DEVELOPMENT CODE

B. Washington County Community Development Code:

1. Article II, Procedure:

Section 202-2 Type II

202-2.1 Type II land use actions are presumed to be appropriate in the District. Type II uses generally involve uses or development for which review criteria are reasonably objective, requiring only limited discretion. Impacts on nearby properties may be associated with these uses which may necessitate imposition of specific conditions of approval to minimize those impacts or ensure compliance with this Code.

The entirety of this segment of the regional waterline is being constructed within the jurisdiction of the City of Beaverton. However, a portion of the waterline is proposed to be developed in an area still zoned Washington County Interim Zone. Consistent with the Urban Planning Area Agreement with Washington County, the project will be process as a Type II Land Use action, in accordance with Section 344, as noted below in Article III.

Section 207-5

207-5.1 Conditions of Approval

The Review Authority may impose conditions on any Type II or III development approval. Such conditions shall be designed to protect the public from potential adverse impacts of the proposed use or development or to fulfill an identified need for public services within the impact area of the proposed development. Conditions shall not restrict densities to less than that authorized by the development standards of this code.

The applicant must comply with all of the applicable code regulations and departmental conditions.

2. Article III, Land Use District:

Section 344 AF-20 District Standards

344-4 Uses Permitted Through a Type II Procedure

The uses listed in Section 344-4.1 and 344-4.2 are permitted subject to the specific standards for the use set forth below and in applicable Special Use Sections of Section 430, as well as the general standards for the District, the Development Standards of Article IV and all other applicable standards

of the Code. Approval may be further conditioned by the Review Authority pursuant to Section 207-5. Unless the use is specifically exempted, the Review Authority shall make specific findings with respect to the standards in Section 344-4. 3.

344-4.1 Permitted Uses which are exempt from Section 344-4. 3:

R. Utility facilities necessary for public service, including wetland waste treatment systems.

The applicant states that subject waterline segment is proposed to pass through two areas of Interim County zoning that are within Beaverton's city limits in the South Cooper Mountain Community Plan Area. These areas are within the UGB, have been annexed to the City of Beaverton and are planned for urban development, at which time they will receive urban City of Beaverton zoning designations. However, in the meantime, they maintain their interim exclusive farm use zoning (AF-20) and uses proposed in this zone must be regulated accordingly. The proposed water pipeline qualifies as a Type II use in the AF-20 district because it is a utility facility necessary for public service. The County's allowance of this use implements Oregon Revised Statutes (ORS) 215.213(1), the enabling legislation that permits utility facilities necessary for public service in exclusive farm use zones. As set forth in that statute, such a facility is "necessary" if it satisfies the criteria of ORS 215.275. As noted in WCCDC Section 344-4.1, the proposed water pipeline is exempt from the standards in WCCDC Section 344-4.3, which would otherwise require findings addressing potential changes to, including increasing the costs of, farming practices as a result of allowing a non-farm use.⁵ A similar standard applies, however, as a result of the application of ORS 215.275.

The following findings from the applicant demonstrate compliance with ORS 215.275.

ORS 215.275 (Utility Facilities Necessary for Public Service in Exclusive Farm Use Zones)

(2) To demonstrate that a utility facility is necessary, an applicant for approval under ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(c)(A) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(c)(A) must show that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the following factors:

Applicant Response: PLM_5.2 is part of the WWSS, a regional water system that will serve a growing population in Washington County. Portions of the WWSS are already under construction. The project owners have determined that PLM_5.2 and the WWSS are needed to provide water for this growing population, complement conservation efforts, and increase the resiliency and redundancy of the region's water supply system.

The need for the WWSS is described in the following “Project Purpose and Need” statement published in the alternatives analysis for the Project:

Population size and municipal water needs in Washington County are expected to double in the next 50 years, with new source supplies needed as early as 2026. Although effective water conservation programs and newer low-water-use appliances have decreased water use by Washington County homes and businesses by 15 to 20 percent compared to a decade ago, conservation alone is not enough to meet projected future demands. Without development of a new water supply source, Hillsboro and TVWD will not have the necessary water supplies to respond to increased water demand in their service areas resulting from projected population growth and development in the region as identified by Metro, the regional growth management agency. For example, population growth in the seven-county metropolitan area is expected to increase by approximately 470,000 to 725,000 individuals by 2035. The seven-county metropolitan area includes Clackamas, Clark, Columbia, Multnomah, Skamania, Washington, and Yamhill counties. Within the urban growth boundary (UGB), population growth is estimated to add 300,000 to 485,000 people from 2015 to 2035 (Metro, 2015).

As a result of this anticipated regional growth, water demand for TVWD and Hillsboro customers is expected to exceed currently available water supplies as early as 2026. Therefore, TVWD and Hillsboro are in need of a new, long-term water supply to supplement existing supplies to meet future demands. In 2026, Hillsboro is expected to have a supply of 41.75 million gallons per day (mgd); however, long-term demands are projected to reach 77.99 mgd in 2085 (GSI, 2017). Similarly, TVWD will have a supply of 22.5 mgd in 2026, with long-term demands projected to reach 73.5 mgd in 2064 (GSI, 2014b).

In addition to meeting increased demands, a new water source is also needed to increase the resiliency and redundancy of the region’s water supply system in the face of earthquakes, droughts, and other potential threats to the system. For example, current regional water supply infrastructure is not projected to withstand subduction zone earthquakes, and significant upgrades to existing infrastructure cannot occur until a new supply is online. With the addition of a new water supply source, the region can rely on a number of sources to meet the needs of the communities. If one source is limited or unavailable, another source can be relied upon.

The purpose of the WWSP is to provide a long-term, resilient water supply option to serve the projected water supply needs of TVWD and Hillsboro residents and businesses.

To ensure that the Program’s purpose is achieved, the chosen water supply option must:

- Meet projected future water supply demands, supporting the region’s plans for responsible growth within the UGB*

- *Reliably deliver a long-term water supply, including in times of droughts, earthquakes, or other disasters*
- *Supply finished water to TVWD and Hillsboro customers*
- *Offer a cost-effective water supply source in service by July 2026*
- *Support ownership and control of the water supply via a partnership between TVWD and Hillsboro*

The above-cited description demonstrates that there is a need for the WWSS, and therefore a need for the proposed waterline.

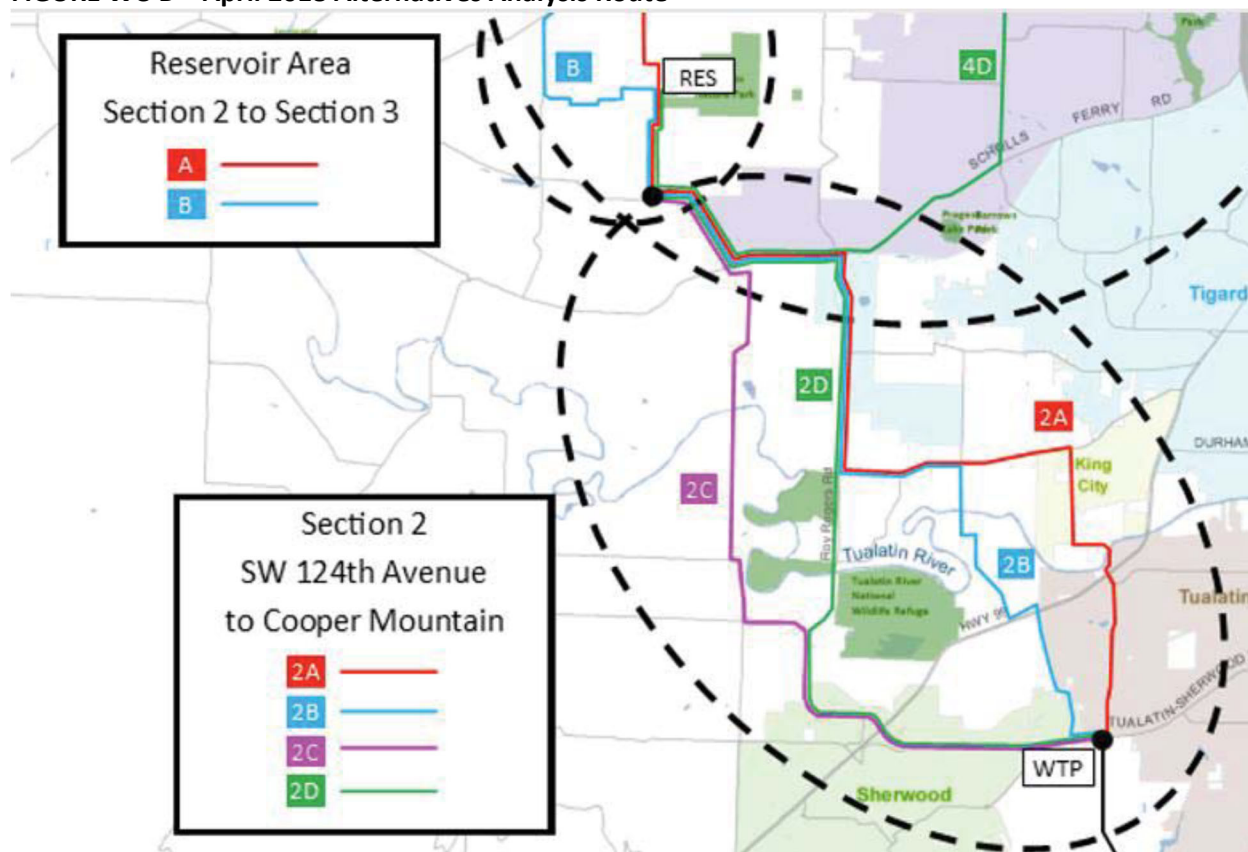
The evaluation of alternative ways to meet the need for a new regional water system has occurred over many years and studies, including options that require locations on various urban and rural lands, culminating in the preparation of an alternatives analysis that was filed with the Project's Joint Permit Application (JPA) submitted to the U.S. Army Corps of Engineers (USACE) and the Oregon Department of State Lands (DSL) in April 2017. (Excerpts of the JPA are provided in Exhibit M.) The "Willamette Water Supply System Alternatives Analysis" (dated April 2017) presents the analysis for the water supply source, major WWSS facilities (the Raw Water Facilities, Water Treatment Plant, and Reservoir Facilities), and the water pipelines. Criteria for evaluating pipeline alternatives included constructability, system resiliency, system compatibility, operations and maintenance, social/community, environmental/permitting/cultural resources, agricultural impacts, and comparative cost.

The subject segment alignment proposed in this application is part of Alternatives 2A, 2B, and 2C.2, three of four alternatives that were evaluated for what the report calls "Section 2," which extends from SW 124th Avenue to Cooper Mountain. (See Figure WC-A.) Alternative 2C.2 was ultimately determined to be the preferred alternative.

The April 2017 Alternatives Analysis (Exhibit C of applicant's materials) is supplemented by a document titled "Pipeline Alternatives Analysis Technical Memorandum" (dated September 27, 2018). This analysis provides additional information about the determination of the ultimate route for the water pipelines as requested by the USACE. (See Exhibit D, page 1 of applicant's materials.) The supplemental analysis addresses the following criteria.

- *Constructability – The route is feasible and can be constructed without undue impacts to public health and safety.*
- *Potential effects on upland/wildlife habitat, wetlands, or rare, threatened, or endangered species – The route avoids or minimizes impacts to natural resources.*
- *System Compatibility – The route supports meeting the water demands of both Project Participants.*
- *System Resiliency – The route meets the Oregon Resilience Plan's Target States of Recovery for transmission facilities.*

FIGURE WC-B – April 2018 Alternatives Analysis Route



The same four alternatives were evaluated in this supplemental analysis as were evaluated in the original analysis, except that what was originally called Alternative 2C.2 was renamed Alternative 2D. PLM_5.2 is part of Alternative 2D, the preferred alignment of the four alternatives. (See Figure WC-B.)

Based on the published alternatives analyses described above, it is concluded that WWSP has considered reasonable alternatives for the WWSS and PLM_5.2 because:

- PLM_5.2 was part of three alternatives (Alternatives 2A, 2B, and 2C.2/2D) considered by WWSP and submitted to state and federal agencies for review.
- Criteria were applied to evaluate which alternative should be selected as the preferred route.
- Based on evaluation, PLM_5.2 was part of the preferred route alternative selected.

The statutory requirement that “reasonable alternatives have been considered” is met. The following findings present the factors from ORS 215.275 regarding the reasons for siting PLM_5.2 partially in the AF-20 zone.

ORS 215.275 (2) (a) Technical and engineering feasibility;

APPLICANT RESPONSE: The 2018 Pipeline Alternatives Analysis found that alternatives other than Alternative 2C.2/2D were not feasible or constructible. See Exhibit D, pages 8-9. Development occurred on the north side of the Tualatin River and resulted in eliminating access for trenchless construction in Alternative 2A. Alternative 2B was studied further and found to be more environmentally damaging than the remaining alternatives and had more constructability challenges. Alignment 2C was discovered to have an unlined landfill just north of the Tualatin River, which poses a risk for potential contamination during or after construction. For this reason, Alternative 2C was eliminated. Alternative 2C.2/2D does not have the above-cited problems and, thus, it is the only feasible alignment.

The evaluation of Alternative 2C.2/2D was further strengthened because it provides two significant opportunities to partner with Washington County to combine pipeline installation with roadway improvement projects (SW Tualatin-Sherwood Road and SW Roy Rogers Road). While geographically outside of PLM_5.2, the partnering opportunities on these road projects are relevant to this application because PLM_5.2 is not an isolated construction project; it is part of Alternative 2C.2/2D. Combining the pipeline installation with roadway construction has technical and engineering benefits that improve project feasibility, including:

- Excavation, hauling, material staging, and similar major construction activities are consolidated into one work area and time period, rather than duplicated. This improves technical and engineering feasibility by reducing the time, cost, and the impacted area of construction.
- Traffic impacts and management during construction are focused on a single area and time period, which reduces traffic-related disruptions for the traveling public and freight haulers.

As design developed for Alternative 2C.2/2D, some portions of the pipeline alignment remained in farm zones due to technical constraints on the urban side of the right-of-way. The east end of PLM_5.2 near SW Roy Rogers Road includes a short segment of pipeline that is adjacent to but outside of urban areas. This segment is located along the south side of SW Scholls Ferry Road in the farm zone. The recently constructed Mountain View High School and associated utilities precluded locating the pipeline on the north side of the road. Constructing the pipeline within the roadway in order to avoid impacts to the farm zone was also considered, but found infeasible due to vehicular and pedestrian traffic constraints.

Therefore, this factor supports a conclusion that it is necessary to locate PLM_5.2 in the farm zone.

STAFF FINDING: The alternatives analysis, as described above and in Exhibit C of the applicant materials, demonstrates the need for the waterline to locate in the farm zone.

ORS 215.275 (2) (b) The proposed facility is locationally dependent. A utility facility is locationally dependent if it must cross land in one or more areas zoned for exclusive farm use in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

APPLICANT RESPONSE: PLM_5.2 is locationally dependent because it connects PLM_5.1 (the WWSS water pipeline in SW Roy Rogers Road) to PLM_5.3 (the water pipeline alignment in SW Grabhorn Road). PLM_5.1 is outside the farm zone. Following the corridors of SW Scholls Ferry Road, SW Tile Flat Road, and SW Grabhorn Road is the most direct route that uses existing rights-of-way between these two fixed points. See Figure 2. There is not a direct route between these two points that can avoid the farm zone.

The east end of PLM_5.2 is located at the northern terminus of PLM_5.1. PLM_5.1 is an opportunity project that has secured development permits. It is part of Washington County's SW Roy Rogers Road capital project, due to begin construction in September 2018. PLM_5.2 is essentially anchored at its east end by PLM_5.1; that is, it is dependent on that location for its alignment.

The above findings support a conclusion that PLM_5.2 is locationally dependent from a "reasonably direct route" physical perspective and due to the committed and permitted construction of PLM_5.1.

Therefore, this factor supports a conclusion that it is necessary for PLM_5.2 to be located in the farm zone.

STAFF FINDING: The location of the adjacent waterline segments demonstrates the need for the waterline to locate in the farm zone.

ORS 215.275 (2) (c) Lack of available urban and non-resource lands;

APPLICANT RESPONSE: Viewed from a system perspective, PLM_5.2 is part of an alignment that maximizes use of urban and non-resource lands. Between the water intake in Wilsonville and the terminus of PLM_5.2, the pipeline is 15.4 miles in length. For 12.4 miles (80.5%) of that distance, the water pipeline travels through urban and non-resource lands. There are two segments where it is necessary to travel outside of urban and resource lands for environmental and technical feasibility reasons. The first segment is PLM_4.3, between Sherwood and Tigard. This segment runs between two points of the UGB in a location that avoids traveling through the Tualatin National Wildlife refuge. The second segment is the western portion of PLM_5.2, which follows the most direct and feasible route to SW Grabhorn Road, where the pipeline will

continue north to the Reservoir Facilities on Cooper Mountain, which are also in the farm zone.

Locally, PLM_5.2 runs along the urban edge of the City of Beaverton on SW Scholls Ferry Road and a portion of SW Tile Flat Road. The western portion of PLM_5.2, outside Beaverton, travels through AF-20 lands that are designated by Metro as Urban Reserve lands (Figure 1) and have been concept planned as part of the South Cooper Mountain Concept Plan. They are currently zoned as resource lands, but will be urban in the future when they are added to the UGB. The City of Beaverton has submitted a proposal to Metro to add those lands during the 2018 UGB expansion cycle. The eastern portion of PLM_5.2 is also designated as Urban Reserve lands.

The lack of a feasible, contiguous route outside the farm zone requires small segments of the WWSS to be located in the farm zone. Therefore, this factor supports a conclusion that it is necessary to locate PLM_5.2 partially in the farm zone.

STAFF FINDING: Considering the entire system of the regional waterline, location of the subject segment is the most direct feasible route that limits impact sensitive areas and resource lands. The farm zone impacts for this segments are already planned for urban development through the South Cooper Mountain Concept Plan. This demonstrates the need for the waterline to locate in the farm zone.

ORS 215.275 (2) (d) Availability of existing rights of way;

APPLICANT RESPONSE: PLM_5.2 focuses on use of existing right-of-way, whether in existing right-of-way, in planned right-of-way, or adjacent to right-of-way in SW Scholls Ferry Road, SW Tile Flat Road, and SW Grabhorn Road. (See Sheets PP-02-PP-04 and PP-15-PP-20 in Exhibit A.) Installation of the water pipeline in and adjacent to the right-of-way avoids and minimizes impacts to agricultural land.

Therefore, this factor supports a conclusion that it is necessary to be locate PLM_5.2 in the farm zone.

STAFF FINDING: The location of the subject segment of the waterline is in most places located in future right of way, to be dedicated for improvements and widening along SW Scholls Ferry Road and SW Tile Flat Road. Therefore, this supports the location of a the waterline in the farm zone.

ORS 215.275 (2) (e) Public health and safety; and

APPLICANT RESPONSE: This preferred alignment avoids the potential health and safety risk associated with Alternative 2C, where the pipeline would cross beneath or immediately adjacent to the unlined landfill just north of the Tualatin River and contamination could occur during or after construction of the pipeline, including potential exposure for construction workers (April 2018 Alternatives Analysis, Exhibit D, pages 8-9).

- Health and safety issues that will be addressed during construction include the following:
- Construction will follow City and County codes and ordinances for noise, light, and vibration.
- Construction will operate according to an approved traffic control plan.
- Dust and erosion will be controlled based on an approved erosion and sediment control plan and per the Project's 1200-C permit.

Therefore, this factor supports a conclusion that it is necessary to locate PLM_5.2 in the farm zone.

STAFF FINDING: The reduction of water contamination by avoiding the above referenced landfill, as well as the construction methods described above, will present a lower impact to public health and safety.

ORS 215.275 (2) (f) Other requirements of state or federal agencies.

APPLICANT RESPONSE: The proposed development of PLM_5.2 will comply with other state and federal requirements as applicable. Concurrence from DSL has been received for wetlands delineations (Exhibit H), and DSL issued a removal-fill permit for the entire WWSS (including PLM_5.2) in May 2018. The USACE is currently reviewing the permit application for the entire WWSS, including PLM_5.2, and anticipates permit issuance in October 2018. Approval by USACE and DSL supports this alignment. Therefore, this standard is and will be met.

STAFF FINDING: Compliance with state and federal guidelines as well as pending US Army Corp of Engineers and Department of State Lands supports the location of the water line.

ORS 215.275 (3) Costs associated with any of the factors listed in subsection (2) of this section may be considered, but cost alone may not be the only consideration in determining that a utility facility is necessary for public service. Land cost shall not be included when considering alternative locations for substantially similar utility facilities.

APPLICANT RESPONSE: As described in response to ORS 215.275(2), comparative cost was a criterion in evaluating alternatives. While the preferred alternative (Alternative 2C.2/2D) is not the lowest cost option, it is the next to lowest cost option and makes efficient use of resources by combining with County road projects on SW Tualatin-Sherwood Road and SW Roy Rogers Road.

Therefore, this standard is met and cost has not been used as the only consideration to determine the feasibility of the chosen route.

STAFF FINDING: The applicant materials demonstrate that cost was not the only option in selecting an alignment. Therefore, this standard is met.

ORS 215.275 (4) The owner of a utility facility...shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair, or reconstruction of the facility.

APPLICANT RESPONSE: The applicant will restore any agricultural land or associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair, or reconstruction of the proposed facility to its former condition, as nearly as possible. In particular, all portions of the work area that are pervious (e.g., areas other than where there are small appurtenances) will be planted with native vegetation that is compatible with adjacent agricultural lands. (See the Restoration Plan in Exhibit B.)

PLM_5.2 on interim County-zoned land in Beaverton will be located partly within existing right-of way and within the paved portion of roadways where agricultural activities do not actually occur. When in the paved portion of the roadway, the trench area will be restored to its previous paved condition or better. Restoration will be conducted as specifically needed for each parcel, given its use prior to construction and its readiness for urban development following construction. Therefore, this standard is met.

STAFF FINDING: The applicant's restoration plan demonstrates revegetation plans that will restore pervious areas to states compatible with adjacent agricultural land. Portions that are currently paved will be restored to a paved conditions. Therefore this standard is met.

ORS 215.275 (5) The governing body of the county or its designee shall impose clear and objective conditions to mitigate and minimize the impacts of the proposed facility, if any, on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmlands.

APPLICANT RESPONSE: Due to the lack of existing farming activities where the pipeline will be located within city limits, the applicant asserts that this standard is not applicable. However, if the City believes otherwise, the following findings (originally submitted to Washington County in a PLM_5.2- County application) are provided as evidence of compliance.

The above-referenced standard is similar to the standard imposed by ORS 215.296, and is also similar to the standard in WCCDC Section 344-4.3, which implements that

statute.11 In order to assist the County and City in determining whether conditions of approval are warranted, the WWSP commissioned an analysis to identify farm uses on properties adjacent to the water pipeline along the entirety of PLM_5.2. Such uses consist of the following:

1. Tree Nut/Fruit Orchards
2. Christmas Tree Farm
3. Pasture
4. Field Crops
5. Native Hay production
6. Horse Stables
7. Possibly some small-scale animal husbandry uses such as beef or chickens

Based on that inventory, WWSP further analyzed the farm practices associated with each of those farm uses to determine if the water pipeline had the potential to significantly impact those practices. Because the water pipeline is located underground and predominantly within a right-of-way, WWSP was unable to identify any impacts on farm practices that would result from the water pipeline, much less any significant impacts. No conditions of approval are therefore warranted to prevent significant impacts. If other farm uses are identified during the processing of this application, WWSP will analyze those farm uses and assist the County and City in determining whether the water pipeline will impact farm practices associated with those farm uses and whether any conditions of approval are warranted as a result. Based on the foregoing, this standard is met.

STAFF FINDING: Staff concurs that the construction and operation of an underground waterline in current or future right of way will have limited impacts to the adjacent land utilized for farming purposes. Therefore the standard is met.

STAFF FINDING FOR COMPLIANCE WITH ORS 215.275 (Utility Facilities Necessary for Public Service in Exclusive Farm Use Zones)

Based on the applicant and staff findings identified on Pages WC-2 through WC-10, staff finds that the proposed project is in compliance with ORS 215.275

344-4.1 Permitted Uses which are exempt from Section 344-4. 3:

The proposed use will not:

A. Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; nor

B. Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use. An applicant may demonstrate that these standards for approval will be satisfied through the imposition of conditions. Any conditions so imposed shall be clear and objective.

The applicant states that Pursuant to WCCDC Section 344-4.1, the proposed development is a permitted use exempt from WCCDC Section 344-4.3. Therefore, these standards are not applicable. However, a Farm Impacts Analysis (FIA) has found that the proposed use will not cause a significant change in farm practices or costs, as described in response to ORS 215.275(5) above. Staff concurs that the standard is met.

344-4.4 The above uses that are not permitted on high-value farmland may maintain, enhance, or expand existing facilities on the same tract, subject to other requirements of law or this Code

The proposed use is permitted on high-value farmland. Therefore, this standard is not applicable.

344-6 UGB Proximity Standards

The proposed use does not involve an enclosed structure nor is an existing facility. Therefore, these standards are not applicable.

344-7 Prohibited Uses

The proposed use is specifically authorized by Section 344 and is not a prohibited use. Therefore, this standard is met.

344-8 Creation of Lots or Parcels by a Land Division

A land division is not proposed. Therefore, these standards are not applicable.

344-9 Marginal Lands

The proposed development does not involve marginal lands. Therefore, these standards are not applicable.

344-10 Dimensional Requirements

The proposed development does not involve the creation of lots. Easements will be recorded where needed to assure access to maintain the pipeline and small appurtenances (e.g., manways, vaults, air valves, and blowoff valves). Therefore, these standards are not applicable.

344-11 Access

The proposed development does not include the creation of lots or an access roadway. Therefore, these standards are not applicable. Easements will be recorded where needed to assure access to maintain the pipeline and small appurtenances (e.g., manways, air valves, blowoff valves, mainline valves, and vaults).

344-12 Article IV - Development Standards

In addition to the requirements of this District, the standards of Article IV – Development Standards, including Section 422 (Significant Natural Resources), are applicable as required by Subsection 403-4.

The proposed development complies with applicable development standards in WCCDC Article IV as addressed below. Therefore, this standard is met.

3. Article IV, Development Standards: Section 403 Applicability

403-2 Master Plan - Minimum Requirements for all Development

The applicant states that a Master Plan is being provided in accordance with applicable provisions of WCCDC Sections 403-2.1 through 403-2.4 below.

Therefore, this standard is met.

403-2.1 A Master Plan in a schematic form which contains the following when determined to be applicable by the Review Authority:

- A. Proposed Uses and Densities where applicable;***
- B. Structure and Building Locations and Type;***
- C. Landscape and Open Space, except for one detached dwelling on a lot of record inside the UGB and all single dwellings and agriculture or forest buildings outside the UGB;***
- D. Roads, Parking and Circulation; and***
- E. Phasing-Development Schedule if applicable.***

The applicant states that the proposed development is an underground use (pipeline) that does not involve above-ground buildings, open space, parking, circulation, roads, or phasing. Thus, the Master Plan consists of engineering drawings (Exhibit A, Sheets PP-04-PP-15), Grading and Erosion Control Plans (Exhibit J), and a Restoration Plan (Exhibit B). Staging areas will be located in the Beaverton city limits (Exhibit A, Sheet G-12). Applicable sections of WCCDC Articles III, IV, V, and VI are addressed in this narrative.

403-2.2 A statement that:

- A. The Development is permitted in the primary district; and***
- B. The siting maintains all minimum dimensional requirements for the District and use.***

The proposed development is a permitted use in the AF-20 District and complies with applicable use and dimensional standards addressed in responses to WCCDC Article III of this narrative.

403-2.3 Additional Evaluation Criteria

The proposed development does not involve above-ground buildings to which these standards apply.

403-2.4 Needed Housing

Discretionary permit procedures and standards shall not have the effect, either in themselves or cumulatively, of discouraging needed housing through unreasonable cost or delay.

This provision applies to proposals for housing. The proposed development does not involve housing, including needed housing.

403-4 Additional Standards Outside the UGB

Applicable provisions in WCCDC Sections 410, 421, 422, 423, and 426 are addressed below in responses in WCCDC Article IV of this narrative.

Section 410 Grading and Drainage

The applicant states that Erosion and Sediment Control Plans have been prepared consistent with the Washington County Erosion Control Plans Technical Guidance Book and as required by WCCDC Section 426. See Exhibit J and responses to Section WCCDC 426 and.

Section 421 Flood Plain and Drainage Hazard Area Development

The subject waterline segment in Beaverton city limits, on land with interim County zoning, is not within 250 feet of a mapped drainage hazard area (DHA) or flood plain.

Section 422 Significant Natural Resources

The subject waterline segment in Beaverton city limits, on land with interim County zoning, does not travel through a Significant Natural Resource Area.

Section 423 Environmental Performance Standards

The proposed development is required to comply with all applicable DEQ and county environmental standards pertaining to noise, odor, drainage and wastewater, and storage. There will be no open storage of material and equipment as part of the proposed use (other than during the construction period). Of the other criteria which might conceivably pertain to the proposed use (air quality, noise, vibration, heat and glare, adequate water supply, electromagnetic interference, radioactive material and toxic noxious matter), all are either: (1) not applicable because the subject matter will not be present on the site (e.g., radioactive material); (2) the effect will occur only during the period of construction (e.g., noise and dust); or (3) the subject is addressed elsewhere in this report.

Section 426 Erosion Control

The applicant states that an Erosion Control Plan consistent with the Washington County Erosion Control Plans Technical Guidance Book has been prepared (Exhibit J). The plans illustrate the methods and/or interim facilities to be constructed and operated during construction to control the discharge of sediment in the stormwater runoff.

A 1200-C permit will be required for the project, because the planned area of disturbance for the project overall is more than one acre. The contractor will follow the provisions of the erosion and sediment control plans and the permit conditions. The following erosion and sediment control measures and practices will be implemented:

- Best management practices for construction of pipelines include bio-bags for stormwater inlets, check dams and wattles along roadside ditches, and sediment fencing.
- The contractor and the WWSP's construction inspector will monitor the sedimentation and implement erosion control measures during construction. Areas of failure will be identified and repaired immediately to prevent potential for downstream sedimentation.

- Additional stabilization measures including mulching, landscape rock and gravel, and erosion control matting may be used in addition to permanent vegetation restoration.
- Temporary sedimentation and erosion control measures will be maintained until permanent vegetation has been established, non-vegetative groundcover has been installed, and upslope areas have been permanently stabilized.
- All local, state, and federal permits pertaining to this project have been or will be obtained.
- Once awarded, the Construction Contract will require the site to be restored to a condition equal to or better than its pre-construction condition.
- Additionally, any land or existing improvements that are damaged or disturbed during construction will be restored consistent with the Restoration Plan (Exhibit B) unless other arrangements have been made with the property owner. The contractor will be required to post both a performance bond and a payment bond insuring compliance with the contract documents and to warrant the improvements, including site restoration, for a period of one year.

Staff notes that the erosion control and grading plan has been reviewed by the Facilities Review Committee for feasibility. Staff further notes that grading and erosion control will be reviewed for compliance with all applicable requirements during Site Development permit review.

Section 430-105 Public Utility

Any corporation, including municipal or semi-municipal corporation, service district, company, individual, or association that owns or operates any plant or equipment for the conveyance of telegraph or telephone messages, with or without wires; for the transportation of water, gas, or petroleum products by pipeline; for the production, transmission, delivery or furnishing of heat, light, water, or electricity; for the transmission and delivery of television pictures and sound by cables; for the transportation of persons or property by street, railroads or other street transportation or common carriers; for the disposal of sewage; or for the disposal of storm water runoff.

The proposed water pipeline will be owned by the Tualatin Valley Water District and the City of Hillsboro, and is being constructed for service to their existing and future customers. The pipeline will be located partially within the AF-20 District, which requires the facility's compliance with the standards set forth below.

***430-105.6 Exemptions from the Requirements of Section 430-105:
Exempted from these regulations are:***

A. Underground pipes and conduits except where such Pipes or conduits would introduce an urban service outside the Urban Growth Boundary.

APPLICANT RESPONSE: Notwithstanding that the proposed use is a public utility, the specific facilities proposed in this application are exempt from the provisions of WCCDC Section 430-105. Pursuant to Subsection A above, the proposed development of PLM 5.2 consists entirely of underground pipes and conduits. Further, those pipes and conduits will not introduce an urban service outside the UGB. As described in the application, PLM 5.2 connects two other sections of pipeline and no service will be provided from PLM_5.2 to land outside the UGB. Indeed, all services from the WWSS will occur only in urban areas.

STAFF RESPONSE: Staff concurs with the applicant that the proposed project is an underground pipe that will not introduce an urban service outside the Urban Growth Boundary. Therefore, the proposed project is exempt for the regulations of Section 430-105.

430-105.4 Approval of a public utility shall be based upon a study submitted by the applicant which includes:

A. The need for the facility, present or future; and how the facility fits into the utility's Master Plan; and

APPLICANT RESPONSE: The responses in this Section, including referenced documents, comprise the "study" referred to in WCCDC Section 430-105.4 above. The need for the WWSS, which includes PLM_5.2, is established in two locally adopted master plans: the TVWD Water Master Plan, Volume 1 (October 2015) and the City of Hillsboro Water Master Plan, Volume II (September 2013). Each master plan is discussed below. The TVWD Water Master Plan studied projected water demand and supply and found that the existing water supply from the Joint Water Commission (JWC) and the Portland Water Bureau (PWB), with some supplement from the Aquifer Storage and Recovery Program (ASR), was insufficient to meet growth beyond 2024. Those sources could provide water for a "medium-growth scenario" up to the year 2024 (Exhibit O, pages 4-5 - 4-7). However, beyond that point, demand would exceed supply.

TVWD explored additional water supply sources including PWB, WWSP, the Tualatin Basin Water Supply Project (which involved raising the dam at Hagg Lake), and a groundwater well field in the Scappoose area. The supply options were evaluated against both financial and non-financial criteria that included demand uncertainty, source reliability, source redundancy, implementation risk, public acceptance, community impacts, finished water quality, sustainability, and governance. TVWD determined the WWSS to be the preferred supply option based on criteria evaluation and public feedback. (See Exhibit O, pages 4-7 - 4-8.)

The City of Hillsboro Water Master Plan includes the City's Long-Term Water Supply Study. Chapter 2 of the Hillsboro Water Master Plan (Exhibit P, pages 2-6) discusses water supply as compared to demand, which is explored in detail in Technical Memorandum 3 appended to Volume II. The supply provided by JWC in Scoggins Reservoir and Barney Reservoir was found to be exceeded such that additional water was identified as needed starting in 2015. Water supply options are evaluated in Chapter 8 and the "Mid-Willamette" WWSP option was selected as the preferred alternative based on reliability, redundancy, ownership, operational complexity, implementation risk, water quality, environmental impact, growth responsiveness, and cost criteria (Exhibit P, pages 39-41).

The Capital Improvement Plans (CIPs) in both the TVWD and City of Hillsboro master plans include the WWSS and provide further evidence of how the WWSS and PLM_5.2 fit within those master plans.

The TVWD Water Master Plan CIP states that WWSP supply integration is assumed in each project identified in its CIP (Exhibit O, page 9-2). Related to WWSP integration, the plan states: "By 2026... the District plans to have a new water supply from the Willamette River Water Supply Program (WWSP)... to bring water from the Willamette River at the Wilsonville Water Treatment Plant towards terminal storage reservoirs on Cooper Mountain... From the reservoirs, transmission options under review included extending a supply pipe west and north around the Cooper Mountain (to supply both the District, and the City of Hillsboro), and east and north around the mountain to connect to the east side of the District, and possibly other water agencies." (Exhibit O, page 7-1)

In the City of Hillsboro Water Master Plan CIP, WWSS is identified under "JWC and Other Projects." It is described in phases that address property and easement acquisition; design and construction of an expanded river intake, a water treatment plant, booster pump station, reservoir, and raw and finished water pipelines; and water treatment plant expansions (Exhibit P, pages 172-173).

Both the TVWD Water Master Plan and City of Hillsboro Water Master Plan are in the process of being updated in 2018 to reflect a more current and detailed description of the WWSS, including PLM_5.2.

In addition to the locally adopted master plans referenced above, the need for the WWSS is also documented in the 2017 WWSP Alternatives Analysis (Exhibit C, page 2). This Alternatives Analysis is required by state and federal environmental statutes and administrative rules. This Alternatives Analysis is cited in response to WCCDC Section 344-4.1 and ORS 215.275 in this narrative.

Therefore, the need for the WWSS and PLM_5.2 has been demonstrated, the facility is reflected in master plans, and this standard is met.

STAFF RESPONSE: Staff finds that the applicant has demonstrated the need for the facility, and that it supports the Tualatin Valley Water District and City of Hillsboro's Water Master Plans.

B. The minimum area required for the facility for the present and anticipated expansion.

APPLICANT RESPONSE: PLM_5.2 is an underground water pipeline. When completed, its "area" will be beneath a variety of street improvements, landscaped land, and restored agricultural land. Farming activity is compatible with the pipeline and may occur at the surface. At this time, the applicant has no plans for expansion of the water pipelines or connections to land outside the UGB.

The water pipelines are sufficient to serve projected demand for many decades. Further, as discussed in response to WCCDC Section 344, the specific route for PLM 5.2 is necessary in part because it is the most reasonable and direct route between the other two portions of the WWSS it will be connecting. To the extent the underground facility is occupying an "area," that area is the minimum required for this purpose. Although not relevant to the permanent use of the pipeline, the construction area to be used is also the minimum necessary. Typical work zones vary from 50 feet wide to 75 feet wide, depending on local constraints such as topography, trees, and roadway lanes. The work zones are the minimum area required for the size of trucks, construction activities, and safety of the construction workers. See the Typical Work Area Plans in Exhibit Q.

Staging for the construction of PLM_5.2 will be located within Beaverton city limits on properties developing in the South Cooper Mountain Community Plan Area. WCCDC Section 430-105(B) does not apply to the proposed staging areas because they are in Beaverton. Therefore, this standard is met.

STAFF RESPONSE: Staff finds that the applicant has demonstrated the identified work zone corridor and staging areas have minimal impact on the AF-20 zoned land.

C. What measures will be used to minimize damage to paved roads & natural resources/open space.

APPLICANT RESPONSE: Measures to minimize damage to and restore natural resources are addressed at various points in this narrative, including in response to natural areas criteria in BDC Section 60.05.25.10 and to significant natural resource criteria in BDC Section 60.67. Restoration following construction related temporary impacts is detailed in the CWS SPL (Exhibit K), the Significant Natural Resource Report (Exhibit E), and the Restoration Plan (Exhibit B).

Measures to minimize damage to paved roads will be part of the construction management plan finalized with the contractor and will specify, following construction activities, that paved roads must be restored to their previous condition or better consistent with County requirements. (See the Preliminary Traffic Control Plan in Exhibit I.) Therefore, this standard is and will be met.

STAFF RESPONSE: Staff concurs that the applicant has demonstrated through findings in responses to BDC 60.67., found in Attachment C, as well as the Clean Water Services Documentation, Restoration Plan, and SNRA Report, that the project has been designed to minimize impacts to natural resource areas. Furthermore, staff concurs that the any impact to SW Scholls Ferry Road and SW Tile Flat Road, both Washington County facilities, will be minimized through the review of a Washington County Facility Permit. The acquisition of a Washington County Facility Permit is a required Condition of Approval in Attachment E.

430-105.5 Site size and yard shall be based upon a site plan submitted by the applicant. The site plan shall consider especially, the compatibility of the facility with existing surrounding uses and uses allowed by the plan designation.

APPLICANT RESPONSE: For an underground pipeline, there is no permanent “site size and yard” as referenced in this standard. The underground nature of the facility, by definition, results in a high degree of compatibility with existing and potential surrounding land uses in the area. Where the water pipeline is located at the edge of farm fields, the land will be restored and farming activities may occur over the top of the pipeline. Where the pipeline is adjacent to existing or future urban development, the applicant is coordinating with property owners and developers to locate the pipeline easement within right-of-way or setback areas. Impacts of construction will be minimized and managed consistent with the Construction and Traffic Management Plans finalized with the contractor. Preliminary Traffic Control Plans are included in this application (Exhibit I). Therefore, this standard is and will be met.

STAFF RESPONSE: Staff concurs the nature of an underground pipeline makes a site size and yard standard not applicable. Staff notes that the location of the pipeline is as close to the existing roadways as possible as to have limited impacts on the surrounding uses.

Based on the above facts and findings, staff finds that the applicable Washington County Community Development are met.

CONDITIONS OF APPROVAL

Willamette Water Supply Program – Design Review Two (DR2018-0134):

A. Prior to site development permit issuance, the applicant shall:

1. Contract with a professional engineer to design and monitor the construction for any work governed by Beaverton Municipal Code 9.05.020, current standards in place per the City Engineering Design Manual and Standard Drawings, Beaverton Development Code (Ordinance 2050, 4010 +rev.), the current standards in place per the Clean Water Services District, Design and Construction Standards, and the City Standard Agreement to Construct and Retain Design Professionals in Oregon. (Site Development Div./JJD/NP)
2. Submit the required plans, application form, fee, and other items as needed for a site development permit application. (Site Development Div./JJD/NP)
3. Submit a completed and executed City Standard Agreement to Construct Improvements and Retain Design Professional(s) Registered in Oregon. After the site development permit is issued, the City Engineer and the Planning Director must approve all revisions utilizing the process set out in the Beaverton Development Code, and the City Engineering Design Manual; however, any required land use action shall be final prior to City staff approval of the engineering plan revision and work commencing as revised. (Site Development Div./JJD/NP)
4. Provide assurances that the ownership of the subject project will guarantee improvements and work per the detailed cost estimate format and breakdown in the site development permit application. The work to be guaranteed includes: 1) grading and surface restoration outside County right of way, 2) completed work to be owned by the City of Beaverton, 3) overhead utility work to be physically undergrounded with the project, and 4) CWS-SPL required plantings and all erosion control needed during construction within Beaverton. The security approval by the City consists of a review by the City Attorney for form and the City Engineer for amount, equivalent to 100 percent or more of estimated construction costs. (Site Development Div./JJD/NP)
5. Submit a copy of issued permits or other approvals from the State of Oregon Division of State Lands and the United States Army Corps of Engineers (for work within or affecting a jurisdictional wetland). (Site Development Div./JJD/NP)
6. Submit a copy of issued permits or other approvals from DEQ for the 1200-C Permit. The applicant shall use the standard plan format per requirements for sites 5 acres or larger adopted by CWS. (Site Development Div./JJD/NP)

7. Submit to the City a copy of issued permits or other approvals needed from the City of Tigard for work within, and/or construction access to areas within the City of Tigard's permitting authority. (Site Development Div./JJD/NP)
8. Submit a copy of issued permits or other approvals from Clean Water Services District for storm system connection permit, and for any construction activity that directly affects the sanitary-sewer trunk main (24 inches in diameter or larger) or other CWS-owned facilities. (Site Development Div./JJD/NP)
9. Obtain the Tualatin Valley Fire and Rescue District Fire Marshal's approval of the site development plans as part of the City's plan review process. (Site Development Div./JJD/NP)
10. Submit a geotechnical and geo-environmental report with the site development permit application for review and approval by the City Engineer. It shall be prepared by a professional engineer or registered geologist to the specifications of the City Engineer. (Site Development Div./JJD/NP)
11. Provide final construction plans and a final drainage report demonstrating compliance with City surface water management requirements per Section 530, of City Resolution 4542 and with CWS Resolution and Order 2017-05. (Site Development Div./JJD/NP)
12. Provide plans for the placement of underground utility lines along street frontages, and for affected services to existing lots. If existing utility poles along existing street frontages must be moved to accommodate the proposed improvements, the affected lines must be either undergrounded or a fee in lieu of undergrounding must be paid per Section 60.65 of the Development Code. (Site Development Div./JJD/NP)
13. Submit to the City a certified impervious surface determination of the proposed project prepared by the applicant's engineer or surveyor. The certification shall consist of the square footage of pre-existing impervious surfaces, modified existing impervious, new impervious surface area created, and total final impervious surface area within the City of Beaverton. (Site Development Div./JJD/NP)
14. Pay storm water system development charges (storm water quality, quantity, and overall system conveyance) as determined by the City Engineer for the impervious area modified and/or created by the project inside the City of Beaverton. (Site Development Div./JJD/NP)
15. Obtain from Washington County (Assurances Section 503.846.3843) permit approval for construction access, staging and traffic control within the rights-of-way of SW Tile Flat Road and SW Scholls Ferry Road. Provide the following items as part of the permit request:

- Preliminary sight distance for construction access to SW Tile Flat Road.
- Traffic Control Plan for SW Tile Flat Road and SW Scholls Ferry Road.
(Washington County/NV)

16. Submit plans showing temporary tree fencing for all on-site trees to be preserved. (Planning/SR)

B. Prior to release of performance assurances, the applicant shall:

17. Complete the site development improvements as determined by the City Engineer and meet all outstanding conditions of approval as determined by the City Engineer and Planning Director. Additionally, the applicant and professional(s) of record shall have met all obligations under the City Standard Agreement to Construct Improvements and Retain Design Professional Registered in Oregon, as determined by the City Engineer. (Site Development Div./JJD/NP)
18. Submit any required easements not already acquired, executed and ready for recording, to the City after approval by the City Engineer for area encumbered and City Attorney as to form. The applicant's engineer or surveyor shall verify all pre-existing and proposed easements are of sufficient width to meet City standards. (Site Development Div./JJD/NP)
19. Provide an additional performance assurances for 100 percent of the cost of plants, planting materials, and any maintenance labor (including irrigation) necessary to achieve establishment of the CWS required vegetation and restoration, as determined by the City Engineer. If the plants are not well established (as determined by the City Engineer and City Planning Director) within a period of two years from the date of substantial completion, a plan shall be submitted by the engineer of record or landscape architect that documents any needed remediation. The remediation plan shall be completely implemented and deemed satisfactory by the City Planning Director prior to release of the security. (Site Development Div./JJD/NP)
20. Ensure all site improvements, including grading and landscaping are completed in accordance with plans marked "Exhibit A", except as modified by the decision making authority in conditions of approval. (Planning Div./SR)
21. Ensure construction of all buildings, walls, fences and other structures are completed in accordance with the elevations and plans marked "Exhibit A", except as modified by the decision making authority in conditions of approval. (Planning Div./SR)

Willamette Water Supply Program – Tree Plan Two (TP2018-0010):

22. Approval of TP2018-0010 is subject to approval of DR2018-0134. (Planning/SR)
23. In accordance with Section 50.90.1 of the Development Code, Tree Plan approval shall expire 2 years after the date of approval unless, prior to that time, a construction permit has been issued and substantial construction pursuant thereto has taken place, or an application for extension has been filed, pursuant to Section 50.93 of the Development Code, or authorized development has otherwise commenced in accordance with Section 50.90.3.B of the Development Code. (Planning/SR)

A. Prior to project completion and during all construction on site, the applicant shall:

24. Continually keep up and in the same location all hard line orange fencing protecting root zones of specified trees to be saved—defined as the dripline plus 5 feet—of each Protected Tree to be preserved, whether on the subject property or on a neighboring property. The following development shall not be permitted outside the limit of work line:
 - a) Construction or placement of new buildings.
 - b) Grade change or cut and fill, except where hand excavation is explicitly approved with the submittal of an arborist's report, as part of application approval.
 - c) New impervious surfaces.
 - d) Trenching for utilities, irrigation, or drainage.
 - e) Staging or storage of any kind.
 - f) Vehicle maneuvering or parking. (Planning/SR)

Steven Regner

From: Ed Bartholemy <edb@kintonland.com>
Sent: Friday, February 15, 2019 10:41 AM
To: Steven Regner; Naomi Patibandla
Cc: dave@oia.org; Desi Kurtz
Subject: Willamette Water Supply Program - Permits

Steve and Naomi,

Thank you so much for staying after the WWSP Facilities Review Meeting and going over our issues. I think we could support the approvals that the WWSP is requesting with some conditions of approval that would ensure that the property owners bordering their project could move forward with their own projects without delays or extra costs of any kind. To that end, I would suggest conditions of approvals at least along my property that restricts their work area to the future Right of Way of Scholls Ferry Rd. Which would be larger work area than the typical constrained work zone detail you showed us. Also, we need conditions of approval that guarantees access to utilities such as but not limited to: Storm and sanitary sewer connections in the Right of Way or future Right of Way without extra costs or delays to the property owner. As you may know, I have a long history of getting along very well with the contractors doing work for the different projects around my properties. And I am sure that we could accommodate the needs of the construction without adversely impacting each other's projects.

I also believe that all the work on the Beaverton side of Scholls Ferry Rd should be done at one time. From Tile Flat Road all the way to my property and across Scholls Ferry Rd to the South Side, should be one project. That may be what they are planning on anyway, but we are not sure, some other documents we have suggest this could draw out to 2026. The communication with the property owners could be improved!

I do need to put a disclaimer in that Dave has been very busy in Salem and has not been able to review all the latest developments concerning this project yet. He may have further comments. In an effort to respond in a timely manner, I wanted to get my response to you without delay.

Thanks again for your help!

Ed Bartholemy
18485 SW Scholls Ferry Rd.
Beaverton, OR 97007 USA
503-628-0526
edb@kintonland.com

Steven Regner

From: Desi Kurtz <desik@kintonland.com>
Sent: Monday, February 25, 2019 8:56 AM
To: Steven Regner
Cc: Ed Bartholemy
Subject: FW: Bartholemy
Attachments: WWSS PLM_5.2 - SW Scholls Ferr Set (Plan and Profile) 121118 15.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning Steve,

Here are some comments that we have sent to the big pipe, Ed would like these on the record.

Also, please send us the timelines, when was the approval made, at what point can we submit formal comments and how long is the appeal period.

Thank you!

Desi Kurtz



18485 SW Scholls Ferry Rd.
Beaverton, OR 97007 USA
503-628-0526 – Office
503-707-1372 – Cell
desik@kintonland.com

From: Desi Kurtz
Sent: Thursday, February 21, 2019 11:35 AM
To: janine.kidd@hdrinc.com
Cc: Ed Bartholemy
Subject: Bartholemy

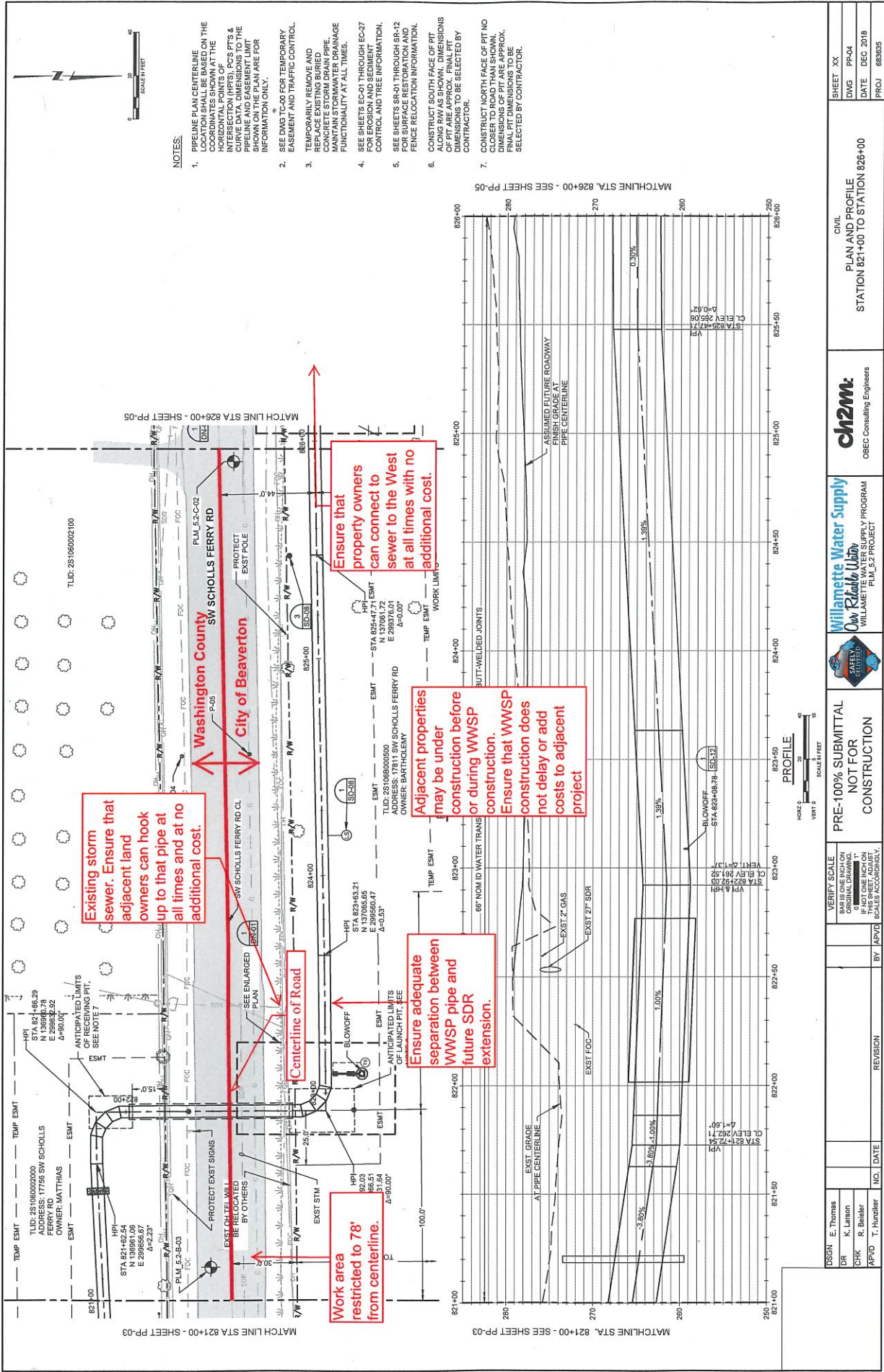
Hi Janine,

Thank you for listening to our concerns today. Here is an summary of what we discussed, I have put them on the plans of the project to help clarify what we were talking about.

Please forward this to the others on the call. I did not get contact information for everyone on the call, would you please send me their email, phone and cell so that we have a way of communicating with your team.

Thanks!

Desi Kurtz



- NOTES:**
1. PIPELINE PLAN CENTERLINE COORDINATES SHOWN AT THE HORIZONTAL POINTS OF CURVE (HPC) AND POINTS OF BEGINNING (PBI) AND POINTS OF ENDING (POE) OF THE PIPELINE AND EASEMENT LIMIT SHOWN ON THE PLAN ARE FOR INFORMATION ONLY.
 2. SEE DMG TC-00 FOR TEMPORARY EASEMENT AND TRAFFIC CONTROL.
 3. TEMPORARILY REMOVE AND REPLACE EXISTING BURIED CONCRETE STORM DRAIN PIPE. MAINTAIN STORMWATER DRAINAGE FUNCTIONALITY AT ALL TIMES.
 4. SEE SHEETS EC-01 THROUGH EC-27 FOR EROSION AND SEGMENT CONTROL AND TREE INFORMATION.
 5. SEE SHEETS SR-01 THROUGH SR-12 FOR SURFACE RESTORATION AND FENCE RELOCATION INFORMATION.
 6. CONSTRUCT SOUTH FACE OF PIT ALONG R/W AS SHOWN. DIMENSIONS OF PIT ARE TO BE SELECTED BY CONTRACTOR.
 7. CONSTRUCT NORTH FACE OF PIT NO LONGER TO ROAD THAN 5 FEET. DIMENSIONS OF PIT ARE APPROX. FINAL PIT DIMENSIONS TO BE SELECTED BY CONTRACTOR.

MATCHLINE STA. 826+00 - SEE SHEET PP-05

MATCHLINE STA. 821+00 - SEE SHEET PP-03

Existing storm sewer. Ensure that adjacent land owners can hook up to that pipe at all times and at no additional cost.

Ensure that property owners can connect to sewer to the West at all times with no additional cost.

Adjacent properties may be under construction before or during WWSP construction. Ensure that WWSP construction does not delay or add costs to adjacent project.

Ensure adequate separation between WWSP pipe and future SDR extension.

Work area restricted to 78' from centerline.

DESIGN	E. Thomas	NO. DATE	REVISION	BY	APPROVED	VERIFICATION	PRE-100% SUBMITTAL NOT FOR CONSTRUCTION	WILLAMETTE WATER SUPPLY	OWN: RAILROAD UTILITY	WILLAMETTE WATER SUPPLY	CH2M	CIVIL	PLAN AND PROFILE	STATION 821+00 TO STATION 826+00	SHEET XX
DR	K. Larson														DMG PP-04
CHK	R. Baier														DATE DEC 2018
APP'D	T. Hurler														PROJ 68385

FILENAME: PLM52 PP-XX.DWG PLOT DATE AND TIME: 11/24/2018 8:12:18 PM